S. Hrg. 103–607

ENVIRONMENTAL PROBLEMS IN THE FEDERAL GOVERNMENT

4. G 74/9: S. HRG. 103-607

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HEARING

BEFORE THE

COMMITTEE ON GOVERNMENTAL AFFAIRS UNITED STATES SENATE

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

SEPTEMBER 21, 1993

Printed for the use of the Committee on Governmental Affairs

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ENVIRONMENTAL PROBLEMS IN THE FEDERAL GOVERNMENT

TUESDAY, SEPTEMBER 21, 1993

U.S. SENATE,
COMMITTEE ON GOVERNMENTAL AFFAIRS,
Washington, D.C.

The Committee met, pursuant to notice, at 9:33 a.m., in room 342, Dirksen Senate Office Building, Hon. John Glenn, Chairman of the Committee, presiding.

Present: Senators Glenn, Levin, and Cohen.

OPENING STATEMENT OF CHAIRMAN GLENN

Chairman GLENN. The hearing will be in order.

For the past several years, the Governmental Affairs Committee has maintained an active interest in how the United States Government is facing up to its environmental cleanup responsibilities. We talk a lot about what is going on with factories and with municipalities all over the country. We have our own set of problems within the Federal Government that we have been too laggard in addressing.

As we approach the next century, the daunting environmental challenges posed by the Government itself are proving to have far-reaching implications, not only for the safety and health of Americans but also for our national security, and indeed our whole economy.

The Federal Government generates, transports, stores, and disposes of massive amounts of hazardous wastes in many diverse operations, and with great difficulty, I might add, in many of them. For instance, in prosecuting the cold war, the Energy and Defense Departments have created profound and widespread contamination not only in this Nation but also in other countries. The thing was produce, produce, the Russians are coming, the Soviets are coming, we have to produce, get the stuff out there. What do we do with the waste, the hazardous waste? Put it in the ground. We will deal with that later, somehow, and the last few years, it has turned out, is the later. Now we have to get going on this.

Also, the Government leases public lands for commercial use, such as mining and landfills, which often result not only in our own Nation, but in other countries, in contamination for which the Government is responsible.

Other Federal activities involving hazardous wastes include leaking underground storage tanks and pipelines, laboratories, prisons, postal facilities, office buildings, illegal drug laboratories seized by law enforcement authorities, and research and development facilities.

While this is just the most recent of many hearings that this Committee has held on this subject, the purpose of this hearing is to take stock of the overall picture. In doing so, we will explore several strategic issues which have significant ramifications for our national environmental policies.

For example, the U.S. Government is responsible for the single largest, most expensive, and complex environmental cleanup problem in the Nation. No one knows for sure what the bottom line is for the total costs for Federal cleanup efforts. According to a 1991 study done by the University of Tennessee, the price tag just for the Energy and Defense Departments alone could be nearly $500 billion.

Federal facility cleanup spending has experienced explosive growth, going from about 276 projects costing $183 million in fiscal year 1984 to more than 10,200 projects budgeted for $12 billion in fiscal year 1994. This almost 100-fold jump in spending is just the beginning.

The facts are, we really don't know how much this is going to cost, but there is one thing that has remained certain throughout all of these estimating processes that different experts and groups and Governments and laboratories have gone through. The one thing that has remained constant is that every time there is an estimate, it is higher.

I recall in this very room right here we had estimates back some years ago when we started some of the interest in the Department of Energy and the nuclear weapons complex all over this country, we had an estimate that astounded us. We thought it was very high. They said it might cost as much as $8 billion to clean up the whole nuclear weapons complex. That was in 1985, I believe. Here we are some 8 years later and we are talking about between $160 and $200 billion just for the nuclear weapons complex alone over a 20- to 30-year period.

The one constant that has remained true throughout all this is that every time we have an estimate, it goes up.

The truly expensive environmental remediation has yet to begin in earnest. In all likelihood, the next big, we could call it an "environmental balloon mortgage payment," will be coming from the Interior Department. The Committee report I released yesterday indicates that the Interior Department has hazardous waste sites potentially in the tens of thousands, and we will be addressing some of that later today.

The existing environmental regulatory framework may not be compatible with the problems facing Federal facilities. EPA has not given Federal facility enforcement the resources and priority it deserves. There are not standards defining, for instance, how clean is clean. To what level do we wish to clean things up? It is a critical tool to control cost growth.

In particular, the establishment of cleanup standards for radiation should be given a high priority by EPA, since the DOE alone may be responsible for as many as 15,000 radiologically-contaminated sites, and this estimate does not include thousands of additional contaminated DOE production facilities to be shut down that will have to undergo decontamination and decommissioning.

Several Federal sites, such as DOE's Hanford Reservation and DOD's Jefferson Proving Ground are so severely contaminated that we lack the funds and technology to restore them to their original conditions. Thus, land use planning is proving to be of critical importance.

Cleaning up Federal facilities may prove to be among the most dangerous occupations in the country. Yet, little has been done to assure a safe working environment, particularly at the Energy and Interior Departments.

Another issue is that financial accountability is not assured. The lion's share of spending for Federal facility cleanup is taking place in DOE, which is responsible for more than half of the total amount budgeted for fiscal year 1994 for Federal facility cleanup. DOE is virtually exempt from financial accountability requirements and has failed to follow required financial management processes and controls.

According to a GAO study done for me last year, cost overruns in DOE's cleanup program are about 50 percent a year. The lack of financial accountability translates into a lack of productivity.

Another issue is whether the U.S. Government is structured properly to deal with the enormous challenge. The first places this question needs to be answered are the EPA and OMB, agencies with Government-wide budgeting, managing, and regulatory responsibilities. It appears that these agencies have not done the coordination needed to address the cross-cutting problems of Federal facility cleanup.

Moreover, the Defense and Energy Departments, which are responsible for over 90 percent of all Government-wide environmental cleanup spending are still structured more to prosecute the cold war and not necessarily set up to address their daunting environmental legacies.

Also, meaningful interagency cooperation to address common issues should be given a higher priority. As part of the process initiated by the Vice President to reinvent Government, make Government more efficient, much more formal interagency cooperation is necessary if we are going to avoid duplication, excessive costs, and take advantage of the skills and strengths that each agency has to offer. We will have to remove the institutional barriers that prevent Federal agencies from making Government work more efficiently.

In this regard, I wish to commend Dr. Rivlin, Deputy Director of OMB, who will be testifying here today, for her efforts to convene for the first time an interagency task force that will focus on the enormous challenge posed by Federal facility cleanup. While this task force is very important, it is just the first step in a long and difficult process ahead.

I wish to thank the witnesses for testifying today and welcome them. Dr. Rivlin will be our first witness today.

PREPARED STATEMENT OF SENATOR GLENN

For the past several years, the Governmental Affairs Committee has maintained an active interest in how the U.S. Government is facing up to its environmental cleanup responsibilities. As we approach the next century, the daunting environmental challenges posed by the Government, itself, are proving to have far reaching implications not only for the safety and health of Americans but also our national security and economy.

The Federal Government generates, transports, stores and disposes of massive amounts of hazardous wastes in many diverse operations. For instance, in prosecuting the cold war, the Energy and Defense departments have created profound and widespread contamination not only in this Nation, but also in other countries. The Government also leases public lands for commercial use, such as mining and landfills, which often result in contamination, for which the Government is responsible. other Federal activities involving hazardous wastes include leaking underground storage tanks and pipelines, laboratories, prisons, postal facilities, office buildings, illegal drug laboratories seized by law enforcement authorities, and research and development facilities.

While this is just the most recent of many hearings that this Committee has held on this subject, the purpose of this hearing is to take stock of the overall picture. In doing so we will explore several strategic issues which have significant ramifications for our national environmental policies. For example:

- The U.S. Government is responsible for the single largest, most expensive, and complex environmental cleanup problem in the Nation. No one knows, for sure, what the "bottom line" is for the total costs for Federal cleanup efforts. According to a 1991 study done by the University of Tennessee, the price tag just for Energy and Defense departments alone could be nearly $500 billion. Federal facility cleanup spending has experienced explosive growth going from about 276 projects, costing $183 million in fiscal year 1984 to more than 10,200 projects budgeted for $12 billion in fiscal year 1994. This almost 100-fold jump in spending is just the beginning. The truly expensive environmental remediation has yet to begin in earnest. In all likelihood, the next big environmental balloon mortgage payment" will be coming from the Interior department. A Committee report I released yesterday indicates that the Interior department has hazardous waste sites potentially in the tens of thousands.
- The existing environmental regulatory framework may not be compatible with the problems facing Federal facilities. EPA has not given Federal facility enforcement the resources and priority it deserves. There are no standards defining "how clean is clean?"—a critical tool to control cost growth. In particular, the establishment of cleanup standards for radiation should be given a high priority by EPA, since the DOE alone may be responsible for as many as 15,000 radiologically contaminated sites. This estimate does not include thousands of additional contaminated DOE production facilities to be shut down that will have to undergo decontamination and decommissioning. Several Federal sites, such as the DOE's Hanford Reservation, and the DOD's Jefferson Proving Ground are so severely contaminated that we lack the funds and technology to restore them to their original conditions. Thus, land-use planning is proving to be of critical importance. Cleaning up Federal facilities may prove to be among the most dangerous occupations in the country. Yet, little has been done to assure a safe working environment, particularly at the Energy and Interior departments.
- Financial accountability is not assured. The lions share of spending for Federal facility cleanup is taking place in the DOE, which is responsible for more than half of the total amount budgeted for fiscal year 1994 for Federal facility cleanup. DOE is virtually exempt from financial accountability requirements and has failed to follow required financial management processes and controls. According to a GAO study done for me last year, cost overruns in DOE's cleanup program are about 50 percent a year. the lack of financial accountability translates into a lack of productivity.
- Is the U.S. Government structured properly to deal with the enormous challenge? The first places this question needs to be answered are the EPA and OMB—agencies with Government-wide budgeting, managing and regulatory responsibilities. It appears that these agencies have not done the coordination needed to address the cross cutting problems of Federal facility cleanup. Moreover the Defense and Energy departments which are responsible for over 90 percent of all Government-wide environmental cleanup spending, are still structured to prosecute the cold war and not necessarily set up to address their daunting environmental legacies.

Also, meaningful interagency cooperation to address common issues should be given a higher priority. As part of the process initiated by the Vice President to reinvent Government, much more formal interagency cooperation is necessary to avoid duplication, excessive costs, and to take advantage of the skills and strengths that each agency has to offer. We will have to remove the institutional barriers that prevent Federal agencies from making Government work more efficiently. In this regard, I wish to commend Dr. Rivlin, who will be testifying today, for her efforts to convene, for the first time, an interagency task force that will focus on the enormous challenge posed by Federal facility cleanup. While this task force is very important, it is just the first step in a long and difficult process ahead.

I wish to thank the witnesses for testifying today and welcome them.

Senator GLENN. First, Senator Cohen, let me add one thing. I have to go to a meeting down the street at the other end of Pennsylvania Avenue for a short time this morning. I will be leaving here a little bit after 10 o'clock. Senator Levin will be here to Chair, and I will be back as soon as I can, but there will be a little break in my attendance here this morning.

But I do wish to thank our witnesses and welcome any remarks by Senator Cohen.

OPENING STATEMENT OF SENATOR COHEN

Senator COHEN. Mr. Chairman, there has been no coordination of our statements. Therefore, mine is merely duplicative of what you have already outlined. In the interest of efficiency, which we are about to criticize the executive branch for lacking, I will forego making any lengthy opening statement and simply submit mine for the record.

I would only suggest that this environmental cleanup has the potential to rival the savings and loan scandal in terms of the magnitude of the problem, and we are estimating that the Federal Government's responsibility could be as high as $500 billion. That is going to amount to roughly $2,000 per taxpayer over the next 30 years. That is the magnitude of the problem that we are now inquiring about.

As you have outlined in your own opening statement, we have first to determine which sites have to be cleaned up, to what standard-residential, industrial—and who is responsible—the companies who have mined the land in the case of Interior, the Government contractors who have left the radioactive waste, or, ultimately, the taxpayer. All of these issues have to be addressed.

Plus, there is a final factor, and that is that there seems to be a lack of strategy on behalf of the executive branch. While the Department of Energy, the Department of Defense, and the Department of the Interior all have significant environmental cleanup programs underway, there doesn't seem to be much in the way of coordination.

I think all of those questions have to be raised today and will hopefully be answered in part or in whole by Dr. Rivlin and the other witnesses. I look forward to their testimony.

Thank you.

PREPARED STATEMENT OF SENATOR COHEN

Mr. Chairman, I am pleased that you have called this hearing to address environmental problems in the Federal Government. However, I doubt that the Committee will be pleased with the testimony that it will hear today.

At a time when public confidence in the government is at an all-time low, the American people may be faced with a staggering bili for environmental clean-up at tens of thousands of sites throughout the Nation. While the exact figure is unknown, one thing is certain—the cost to clean up the Nation's waste sites will be very expensive. One estimate developed by the University of Tennessee, has suggested that the total cost of environmental clean-up approaches $1 trillion with the Federal Government responsible for about half. The bulk of these expenses will be required to clean-up sites managed by the Departments of Defense, Energy and Interior. Just

2 months ago the House Subcommittee on Oversight and Investigations estimated that the cost to clean up Department of Interior sites alone, which consist mostly of abandoned mines, "will cost tens of billions."

The public and our economy can ill-afford another crisis on the scale of the Savings and Loan debacle. We already have seen government expenditures for clean-up increase 65 fold over the last decade from $183 million in 1984 to $12 billion budgeted for fiscal year 1994. And if estimates of future government expenditures are correct, this problem will cost each taxpayer more than $2,000 over the next 30 years.

While taxpayers will soon realize that they will be asked to pay for the most expensive and problematic environmental cleanup ever undertaken, there are still significant unanswered questions. First, do all these sites require clean-up? If so, to what standard will they be restored? Should we adopt the premise that these sites will be restored to residential standards, or to industrial standards? More fundamentally we need to ask if the government is even capable of dealing with this problem.

Another question on everyone's mind is who will pay. Will it be the companies who mined the sites, will it be the government contractors who left a legacy of radioactive waste or will the American taxpayer once again get saddled with the bill? To the taxpayers in my state of Maine, footing the bill will be a difficult pill to swallow particularly in these difficult economic times. It will not be easy to explain to the hard working people of Maine why they must pay for the irresponsibility and failure of the government and its contractors to identify the potential for, and prevent the situation we find ourselves in today.

Even more disturbing is the fact that the government has no strategy to address the challenge of environmental clean-up. Despite the fact that the Departments of Energy, Defense and Interior have significant clean-up programs, coordination between them is virtually non-existent.

Lack of strategy and coordination is evident. The success of the Federal Government's management of its cleanup programs to date has been mixed. In some instances, such as the Department of Energy's Uranium Mill Tailings project, programs have been successful. On the other hand, the Department of Interior has been slow to address its environmental problems. Consequently, its limited clean-up efforts have not produced acceptable results. In addition, the National Academy of Sciences says that the Bureau of Land Management at Interior has been deliberately avoiding this matter. Better structure and communication among programs will avoid repeating failures and enable managers to adopt successful strategies.

I am looking forward to hearing representatives from OMB discuss how the government can better coordinate its efforts and perhaps cut the costs associated with this environmental challenge. I am also hopeful that the EPA will take a more active role in giving a higher priority to formulating an aggressive strategy for Federal facility clean-up.

We must also ensure that clean-up dollars are used more effectively. Experience to date with clean-ups managed by the Environmental Protection Agency and the Departments of Energy and Defense suggested that any clean-up costs are difficult to estimate and increase significantly with regulatory and legal problems. As President Clinton suggested in his February speech to a Joint Session of Congress, we need to ensure that the funds are used for clean-up and not for paying legal fees.

We know that the origins of poor performance in government clean-up efforts are in the structure of government and poor teamwork between its agencies. We also need to take steps to ensure that this money is spent for its intended purpose. Today's hearing will focus on the capabilities of Federal agencies and how they can be successfully coordinated. I would like to pledge my support in working with the Committee to meet the Nation's environmental challenges in an efficient and economical manner.

Chairman GLENN. Thank you. Your testimony will be included in the record.

I think you have hit it on the head. We need to define the sites, we need the costs, how much, and how we are going to prevent this in the future. This is really an enormous thing. Every time we have looked at this thing, it has gotten worse and worse and worse. It is like some of these amoebas that grow out of the ocean in a Japanese movie or something. They just take over everything, and we don't know where we are going with this thing.

I know you are trying to bring some sense into an approach to this thing and we look forward to your testimony, Dr. Rivlin. Thank you.

TESTIMONY OF ALICE M. RIVLIN,[1] DEPUTY DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET

Ms. RIVLIN. Thank you very much, Mr. Chairman.

With your permission, I would like to submit the full testimony for the record.

Chairman GLENN. Without objection, it will be included in the record in its entirety.

Ms. RIVLIN. I will summarize it very briefly so we can get on to questions, because you have a lot of witnesses this morning.

I am delighted that you are holding this hearing. It is a very important role for this Committee, and we are glad that you are focusing public attention and our attention on the magnitude of this problem and the need for a strategy.

As you have pointed out, both you and Senator Cohen, the cleanup of hazardous and nuclear waste on Federal facilities is a huge problem and it is our problem, ours, the Government's. We created it and we have to do something about it.

It is an actual and potential public health and safety problem of major magnitude. The end of the cold war and the closing of many sites and facilities and bases means that we are returning these sites and facilities to other uses and we have to be sure that they are safe and healthy for the other uses to which they can be put.

This is, as you have pointed out, a huge budget issue, both actual and potential. It is not trivial right now. We are spending $12 billion in fiscal year 1994 on facility cleanup, almost all of it at the Department of Energy and the Department of Defense. The total cost of cleaning up Federal facilities is unknown, but as you have pointed out, it is certainly in the hundreds of billions, and that means that this effort must be managed very wisely.

It is a huge management problem. It is especially difficult to manage the large number of contractors that are working on a very large scale. There is potential for boondoggle here. It is a big test of the Government's ability to manage effectively.

This problem is also a potential public relations problem. The public needs to be involved. The public is worried about these kinds of hazards and we must make a greater effort to involve the people who live near these sites and facilities, the stakeholders, as the current vernacular has it. They need to feel that they are part of the solution. Their needs and the uses to which these facilities will be put in the future must be considered, but that is a difficult thing to do. It can lead to endless wrangling, and we have to evolve processes that will make people feel they had their say, but allow us to come to closure and get on with the job.

It is also a very challenging intergovernmental problem. States have jurisdiction here. Localities are involved as well as the Federal Government. It will take a great deal of earnest effort to have all of these levels of Government working together.

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[1] The prepared statement of Ms. Rivlin appears on page 53.

But besides being a big problem, cleaning up Federal facilities also presents some opportunities. This will be a major expenditure of Federal funds and it will create a lot of jobs. There are opportunities here for training people, for developing skills.

There are opportunities for developing and marketing new technology. This isn't our problem alone. Hazardous waste and nuclear waste are problems around the world. If we can develop the right kinds of technology and managerial techniques and methods, we will be able to help the private sector and other jurisdictions within the United States. There may also be a substantial market for this kind of expertise and technology around the world.

And it is an opportunity to show that the Government can address a problem and get it solved. We need to address the magnitude of this problem honestly, we need to consider alternatives, we need to set priorities, and we need to spend the public's resources wisely.

As you have pointed out, there has been limited success so far. There are lots of reasons for that, and I don't think we need to waste time assessing blame at this point. The problem crept up on the Government. At the time much of this problem was created, people didn't understand how dangerous this stuff was and didn't have time to worry about it. There were other priorities: winning wars, being safe internationally. There was often not technology developed yet to deal with it, and once people realized how large it was, there was an unwillingness to admit how bad the situation really was.

That is all past, and now it is time to get on with the job.

The Clinton administration is very eager to get on top of this problem, to lay out a strategy, and to show results. You will hear this morning from several agencies who have major challenges confronting them. You will hear about what they are doing and how they intend to get on top of the problem.

I think you will notice that there are several themes that recur in all of this testimony. I also hope you will notice a new energy and resolve to get on with the job. The themes are, we think, the elements of a new strategy, some of them are set forth in my statement.

One important theme that recurs is that we must define what we want to use these sites and facilities for as we look at the cleanup problem. Not all of them are going to be used for residential purposes or are places you might want to put a day-care center. We have to think about what are these sites going to be used for. We can't clean all of them up. It is neither feasible nor affordable to have them all cleaned to a residential standard. We need to decide which ones need to be cleaned to a pristine standard and which need to be cleaned to other standards.

Another theme will be expanding local stakeholder participation in this discussion of what to do and what the future uses of the property should be.

Another theme will be assessing risk—health risk and environmental risk—in an orderly and consistent way across agencies.

Another will be establishing common definitions and standards which are consistent across agencies and which need to be developed with respect to various different kinds of sites and wastes.

We need to develop more reliable cost estimates for cleanup. As you point out, the cost estimates keep rising. That tends to happen with cost estimates. But we need to be much more careful and realistic about what this is all going to cost.

On the other hand, we can't spend all of our time inventorying the problem and assessing the costs. We have to get on with the job. As Sherri Goodman points out in her testimony later, there is a need for some common sense here for assessing the magnitudes and then picking out the most serious problems and getting on with them.

There is a strong need for improving agency contracting practices, as you pointed out, Mr. Chairman, to improve competition and contractor accountability.

There is a need for increasing the efficiency of assessment and cleanup and systematically introducing productivity improvements and cost reduction methodologies and technologies.

There is a need for much more emphasis on prevention. We are dealing here with the sins of the past, but we don't want to be dealing with the sins of the future. We need a much greater emphasis on how to prevent these things from happening in the future.

We need to ensure the safety and health of the workers that do this work and be sure that they are protected.

And, as I said earlier, we need to develop more cost-effective new technologies to use the Federal facility cleanup as a laboratory for developing technology that can be used in other parts of the country and the world.

The Clinton administration is committed to implementing a comprehensive strategic approach to the waste management and cleanup problems of the Federal Government. In the coming months, OMB and the White House Office of Environmental Policy will work with the responsible agencies to help develop and carry out a coordinated strategy for Federal facilities waste management and cleanup activities.

To do this, we are creating a policy-level interagency group that we hope will develop and implement a coordinated approach. This will be a policy-level group, a strategizing group. We don't want to manage this activity or micromanage it from the White House or from OMB, but we need to work together as an Administration and make sure that there is a strategy and that it is being carried out.

I believe OMB's point of view is the same as this Committee's. Our concern is with wise management of the Government's resources, both its dollars and its people.

The initial priorities for the policy group, which will include all of the key agencies represented here today and some others—but we don't want it to be too large—will be to develop a strategy for Government-wide oversight and coordination of Federal waste management.

We will work with the group which is focusing on the reauthorization of Superfund to make sure that the Federal site problem is well addressed in that reauthorization, and we will see whether there are additional pieces of legislative language that need to be recommended.

We will try to develop and implement an effective approach for expanding local stakeholder involvement.

We will work hard on the problem of defining site use options and integrating this question into policy planning and decision making at the agency level.

We will work on definitions and standards for risk levels of workers and the public and the environment.

We will try to identify needs and opportunities for the development and application of cost-effective new technologies.

We will try to identify and implement reforms to control program costs and substantially improve productivity and efficiency within and across agencies.

That is a very ambitious agenda, and we hope to be able to return to this Committee in a few months and report on progress and a more systematic, strategic approach to this major problem.

Thank you.

Senator LEVIN [presiding]. Dr. Rivlin, thank you very much.

It is clear from your testimony and all the other evidence that the Federal Government has a major environmental cleanup ahead of it, and the actual scope of this problem may be so huge as to dwarf what has been done by the private sector in compliance with Superfund and environmental laws and may even dwarf the nuclear weapons complex cleanup bill that we are going to be paying.

It is going to be a major test of reinventing Government as to whether or not we can coordinate the activities and apply the resources that are necessary to this cleanup.

There was a study that was done at the Chairman's request in 1990 of the hazardous material liabilities of the Federal Government, and the CBO found that the bottom line was that nobody knew the bottom line. The CBO concluded then that the Congress needs to know the size and the relative risks of various hazardous waste problems in order to allocate funds effectively.

In your testimony, you mention that the Federal facility environmental cleanup costs could easily require hundreds of billions of dollars. I believe, although I wasn't here, that Senator Cohen used a figure of $500 billion.

I am wondering whether or not you have any estimate closer than or more precise than hundreds of billions of dollars. Can you give us a range? Does Senator Cohen's number sound about right to you, about $500 billion?

Ms. RIVLIN. At the moment, we don't have a precise number, except that we know that it is large. I don't have any basis for saying that Senator Cohen is wrong, but we will——

Senator LEVIN. He is usually right, so when he says $500 billion, I think it is a pretty safe number.

Ms. RIVLIN. We had better worry about it, that is right.

We are working hard within the Administration now to refine the cost estimates and we should have a plausible range of estimates back to the Committee before too long.

As I said, though, earlier to the Chairman before you came in, I don't think that we are going to be able to pin this down to the last dollar or the last $10 billion or that it would be useful to spend an enormous amount of resources on predicting exactly how much this is going to cost in the future. We know that it is very large and we need to inventory the known problem and get on with it as quickly as possible.

Senator LEVIN. The CBO report also stated that Federal lending agencies, such as the SBA, the Economic Development Administration, the Farmers Home Administration, and the Resolution Trust Corporation, may be liable for cleaning up hazardous waste at industrial and commercial properties acquired through foreclosure.

Do we have any estimate of the liability for that particular problem, the additional cleanup costs that we are going to face through foreclosure of properties that we lent money on where the lender does not pay the debt and we end up with the property back?

Ms. RIVLIN. We are not as worried about that as the CBO suggested. In 1991, OMB, perhaps prompted by this warning, coordinated a Government-wide effort to produce a regulation that clarified the potential liabilities of those entities that have ownership primarily for the protection of security interests, financial interests, and this regulation was promulgated in mid-1992. It essentially clarified that the agencies that hold property as a result of lending or coming into possession, like the RTC, have limited liability for these properties. We don't see this as a major, looming problem.

Senator LEVIN. You talked about part of your strategy being coordination of waste management, and you have announced here an interagency group at a policy level. Previously, the President announced that there was a draft executive order on Federal procurement of recycled products, which would create a Federal environmental executive committee. That would presumably have had cleanup as one of its responsibilities.

I am wondering whether you are familiar with that Federal environmental executive committee which a draft Executive order indicated would be set up, and if so, whether or not there is any duplication between that executive committee and the interagency task force which you are describing today.

Ms. RIVLIN. I don't think there is. I am familiar with the order on recycling, which has been quite controversial and is still in draft, but this is a fairly limited piece of the action and does not relate directly to Federal facilities cleanup.

Senator LEVIN. I assume that some effort will be made to make sure there is no duplication?

Ms. RIVLIN. We don't want to duplicate anything.

Senator LEVIN. It was our understanding that cleanup was one of the functions of that committee, so you might just take a second look at that to make sure that that duplication is avoided.

Do you know how many agencies currently have estimates for hazardous material cleanup costs?

Ms. RIVLIN. No, I don't know exactly how many agencies do. The number of good estimates is fairly small at the moment and we are working to improve that.

Senator LEVIN. Do we have any idea as to how many compliance agreements exist between Federal agencies and the EPA and states? That is compliance with environmental laws. Do we have a handle on that at all?

Ms. RIVLIN. EPA does have a handle on that, and I think that would be a better question for the representatives of EPA. I don't know exactly what the number is, but they have been working very hard on that.

Senator LEVIN. All Federal agencies, I understand, are supposed to report their annual pollution abatement spending to the OMB under the A–106 process. It appears that the process isn't working. For example, cost reporting to OMB under A–106 for fiscal year 1993 is about 100 percent less than what is actually budgeted by the agencies.

Could you give us your reaction to that, the A–106 process and why it doesn't seem to be working?

Ms. RIVLIN. I think you are absolutely right. The A–106 process has been a problem and hasn't worked very well. It was partly, I think, a definitional question, that what agencies were asked to report on in A–106 was not exactly what they were asked to submit for the budget.

Whatever the history, we are working on refining these requests and making them match the budget better, and we expect the fiscal year 1995 submissions to reflect those improvements.

But I think there is more to be done on exactly how the reporting works, and we will be working on it.

Senator LEVIN. The interagency working group which you are establishing is very necessary. We congratulate you on establishing it. Is there any kind of a time schedule for the group to report or to act? Do we have any kind of a time line at all or an estimate as to when we can expect some action from that group?

Ms. RIVLIN. We are working on that. That is one of the first agenda items for the group, is to work out exactly what do we want to do and by when can we do it. We expect that this group will not have necessarily a long lifetime here. We want to get something done in the next 18 months or 2 years and set out a schedule of what can be done by when, but we will be very happy to report back to this Committee what our plans are as soon as we have them.

Senator LEVIN. I know the Chairman would have wanted me to ask for that report back. You have volunteered it without even the question. He has taken a leadership role in this area. I know how hard he has worked at it over the years. Other Members of this Committee, Senator Cohen and others, have taken a leadership role as well in this effort, so we are looking to you for results in an area where there has been a great deal of frustration.

We thank you again for your action in focusing some responsibility by appointing this interagency working group.

Senator Cohen.

Senator COHEN. Thank you, Mr. Chairman.

Dr. Rivlin, I think that you correctly pointed out that we shouldn't spend a good deal of time trying to fix blame on who is responsible for this but we should try to deal with the problem as constructively as we can and as quickly as we can.

I think that for years we have known that we have dumped raw sewage into our lakes and rivers and the notion was, well, if it is out of sight, it is out of mind. We found out, of course, that the only thing that was out of sight was the cost of restoration through the various Clean Water Acts and Clean Air Acts that we have had to pass.

Let us not spend a lot of time trying to determine with any kind of exactitude the exact nature of the costs involved. That is what you are suggesting to us. But the question I have is how you are going to budget for it.

Ms. RIVLIN. I am not suggesting that we shouldn't spend time on knowing what the costs are. I am only suggesting that having an exact total is probably not going to be possible.

What we do know already is that the costs are very large compared to the resources available in the near term. That means that we have to budget very carefully and with a view to two things: picking the most serious problems from a risk point of view and getting on those first, and managing the process as effectively as we can. There are no resources to be squandered in wasteful types of cleanup.

Senator COHEN. Can I ask you whether or not the President's 5-year plan includes monies for the environmental cleanup of any significant magnitude?

Ms. RIVLIN. It depends what you mean by significant magnitude. We have budgeted $12 billion this year. That is not peanuts, but——

Senator COHEN. That doesn't even begin to deal with it.

Ms. RIVLIN. It doesn't begin to get on top of the problem, and we will be budgeting over the next——

Senator COHEN. What I am asking about is the 5-year plan.

Ms. RIVLIN. It contemplates modest increases in those numbers, but the——

Senator COHEN. Dr. Rivlin, what I am asking for is the President's 5-year plan, does it include roughly $12 billion a year plus "modest increases" over that 5-year period of time? Is that a realistic number for us to assume?

Ms. RIVLIN. Yes.

Senator COHEN. The President has made a great deal, and I support him in this, of truth in budgeting and the question really is, are we going to get this piecemeal down the line, saying well, we have $12 billion this year, we will have $14 billion next year, maybe $18 billion the year beyond, but that doesn't really begin to deal with the problem in any significant way if the numbers that I am looking at are correct.

Senator Levin pointed out that I made reference to the $500 billion amount. That comes actually from the University of Tennessee, which has made an examination and has calculated potential overall cleanup costs of $1 trillion, one-half of which the Federal Government would be responsible for.

I might point out that in 1984, we spent $183 million. Ten years later, the figure is $12 billion. That is a 65-fold increase. So if you take the same line of progression and take the $12 billion figure and you multiply that by 65, you come out with $780 billion, and it is probably higher than that, given modest inflation.

Ms. RIVLIN. Regardless of whether we know what the total number is, suppose it is $500 billion, what we do know is we don't have those resources now. We couldn't spend it wisely if we had it. We don't know enough yet about what these sites are like, which are the most critical in the near term, and how we proceed from here.

I don't think, at the moment, the lack of money is the problem. It is the lack of a strategy and a clear view of what is the most important thing to do first that is holding things up.

Senator COHEN. You mean if we had a strategy, the money would be available?

Ms. RIVLIN. No, you know that is not true. Once we have a view of what the total problem or most of the problem is and what are the most important things to do, then there are trade-offs. There are trade-offs between this problem and other problems. Over the next 5 years, what we do know is discretionary spending is capped and we will be making trade-offs between this problem and other problems. There are no exact ways to make those trade-offs. They will be made in the White House; they will be made in the Congress.

Senator COHEN. I raise it because right now we are still debating the issue of whether we are going to go forward with a new space station that will cost tens of billions of dollars. There are trade-offs that some of us are looking at in terms of whether we can afford to do all the things that we would like to do, like build space stations that may not have any scientific research benefits that would warrant that kind of an investment, compared to spending tens of billions to clean up the environment.

I am told, for example, that the Department of Energy contractors have dumped enough radioactive and contaminated liquid into the ground to fill up a lake the size of Manhattan 18 feet deep. Now that is putting in fairly graphic terms the nature of the problem that we have to contend with.

So those trade-offs are very, very important, and I think the sooner we can find out exactly how much it is going to cost and how we are going to pay for it, we will be able to make those trade-offs and make a more effective argument on the Senate floor and the House floor and to the American people of where we should be putting the very limited resources that we have.

Just a final question, there is an issue always raised about double-dipping, and I am told that a number of DOE contractors who were responsible for initially contaminating the sites have been awarded the contracts to clean them up. Does that strike you as an appropriate policy for us to pursue?

Ms. RIVLIN. It is certainly one that ought to be borne in mind, but I am not sure that one should always rule out a contractor because they were involved in the site. They may know the most about it.

But the contracting procedures of DOE are ones that both DOE and the OMB are concerned about. There is a major look at these contracting procedures underway at DOE, with which we are cooperating, and that is possibly an issue.

Senator COHEN. I hope you will take a closer look at that particular issue. The notion that somehow you would use the same contractors because they know where the skeletons are carries a more ominous connotation in this particular case with the kind of contamination that has taken place.

Ms. RIVLIN. I can imagine incentive problems with this. I agree.

Senator COHEN. Thank you very much, Dr. Rivlin.

Senator LEVIN. Just one followup on that. You are not suggesting that where a contractor acted improperly or illegally in contaminating the land that that contractor should continue to be utilized, are you?

Ms. RIVLIN. No, I am not suggesting any knowledge of this problem at all, Senator. It is certainly one we need to look at.

Senator LEVIN. I assume, although I don't know for sure, that the question refers to people who may have acted improperly or illegally in contaminating land. I would hope in those cases that we not use the same people who acted improperly. Quite the opposite, if they acted improperly, we ought to be collecting from them rather than rewarding them with a new contract.

Ms. RIVLIN. Absolutely. I didn't hear that in the Senator's question.

Senator LEVIN. I think that is probably the implication of it.

Thank you. Your leadership is essential. We, as always, look to you confidently for it. This is a multiagency problem which you are in a unique position to help coordinate, and I know that Senator Glenn in particular looks forward to your reporting back to this Committee on the progress of that task force.

Ms. RIVLIN. Thank you.

Senator LEVIN. We thank you for your appearance this morning.

Ms. RIVLIN. We expect to be back and to talk about this issue again. Thank you very much.

Senator LEVIN. Our next panel is Steve Herman, the Assistant Administrator for Enforcement of the EPA.

Mr. Herman, maybe you could tell us who your colleagues are here this morning.

TESTIMONY OF STEVEN HERMAN,[1] ASSISTANT ADMINISTRATOR FOR ENFORCEMENT, U.S. ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY GORDON M. DAVIDSON, DIRECTOR, OFFICE OF FEDERAL FACILITIES ENFORCEMENT; THOMAS McCALL, ACTING DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF FEDERAL FACILITIES ENFORCEMENT; AND HENRY L. LONGEST II, OFFICE DIRECTOR, OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, EPA

Mr. HERMAN. I will, Senator.

Good morning, Mr. Chairman, Members of the Committee. With me I have Gordon Davidson, who is the Director of the Office of Federal Facilities Enforcement; Thomas McCall, who is the Acting Deputy Assistant Administrator for the Office of Federal Facilities Enforcement; and Henry Longest, who is the Office Director of the Office of Emergency and Remedial Response.

Mr. Chairman, I would ask that my full statement be put in the record and I will just summarize it.

Senator LEVIN. We appreciate that. It will be made part of the record.

Mr. HERMAN. Thank you.

EPA has a unique role in Federal facilities cleanup. We play the role of both the regulator and enforcer, and in many cases we are also a partner, a trainer, and a teacher. This makes for a very, very complicated existence at times.

EPA, and in some instances State regulatory agencies, oversee the Federal Government's efforts to safely manage and clean up the radioactive, hazardous, and mixed wastes generated from its weapons research and production activities, operation of military bases, and a myriad of activities in nondefense areas.

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[1] The prepared statement of Mr. Herman appears on page 57.

As a regulator, EPA has compliance, enforcement, and cleanup oversight responsibilities. EPA inspects Federal facilities for compliance with environmental laws and regulations and takes enforcement actions to the extent authorized by law to address noncompliance.

Regarding cleanups, EPA negotiates and oversees enforceable interagency agreements at Federal national priority list sites covering the full scope of RCRA and Superfund activities.

As a matter of policy, EPA and other Federal agencies have sought formal participation by the States as signatories to these interagency agreements. Thus far, EPA has signed 108 interagency agreements for cleanup at Federal facilities.

EPA has the authority under Section 120 of CERCLA to enforce the cleanup milestones contained in these agreements. EPA has also assessed stipulated penalties for violations of cleanup milestones or other requirements of the agreements based on various criteria, including gravity of the violation and the extent of environmental harm.

EPA recognizes that a key challenge in the cleanup of the sites contaminated with radionuclides is the lack of regulations in this area. In response to this, the agency is moving ahead expeditiously to develop radiation site cleanup standards and waste management standards. A target date of early summer 1994 has been set for the issuance of the draft cleanup standards.

Compliance at Federal facilities is monitored by EPA through both facility inspections and analysis of self-monitoring reports which are required of the Federal agencies. Upon the discovery of a statutory or permit violation at a facility, the appropriate EPA region initiates an enforcement action pursuant to the authorities granted to the agency.

EPA is also working cooperatively with other Federal agencies to streamline cleanup procedures in order to more expeditiously address contamination at Federal sites. The need for streamlining cleanups while still protecting public health and the environment is especially pressing where military bases are being closed. We are cooperating with the Department of Defense to expedite economic development and reuse consistent with environmental protection responsibilities and the Community Environmental Response Facilitation Act.

The cleanup strategy focuses on improving site assessment in the early phases to avoid duplicative studies, the use of presumptive remedies for similar problems, the use of contingency records of decisions to allow for risk-taking and the use of innovative technologies, and the inclusion of community participation in the decision making at Superfund sites. EPA's Region III office in Philadelphia has two sites proposed as pilots for streamlined cleanup. They are the Beltsville Agricultural Research Center in Prince George's County, Maryland, and the Langley Research Center in Langley Air Force Base, Hampton, Virginia.

Support for the DOD based closure and realignment property transfer efforts is one of the top priorities of the Clinton administration and Administrator Browner. On July 2, President Clinton announced his five-part program for economic development at closing military bases. Regional and headquarters EPA staff worked with the military—both at the installation and command level—State regulators, local Government officials, local development or redevelopment agencies, military property transfer offices, and environmental groups to address the myriad environmental and related property transfer issues arising under base closure.

The Administration is committed not only to cleaning up Federal facilities in an efficient, effective manner, but is committed to pollution prevention in the very first instance. To this end, the President announced a new Executive order on Pollution Prevention and Community Right to Know in August 1993. The signing of this order follows through on President Clinton's Earth Day statement that, ". . . it is time that the U.S. Government begins to live under the laws it makes for other people." This Executive order takes us another important step forward in our goal of establishing a level playing field for Federal facilities compliance with all environmental laws. Federal facilities will now be required to comply with all provisions of the Emergency Planning and Community Right to Know Act, including public reporting under section 313, the Toxic Release Inventory.

With up to an estimated 2,000 Federal facilities having to comply with at least some reporting and notification requirements of EPCRA, this data should help provide the basis for pollution prevention activities also required under this order.

Also under the Executive order, all Federal agencies are required to submit plans outlining their respective contributions to the President's goal of "reducing their releases of toxic pollutants by 50 percent by 1999." Implementation of the President's 50 percent reduction goal should result in significant long-term fundamental change in how the Federal Governmental approaches its environmental management responsibilities.

Let me elaborate further on one more item, which is the development of innovative technologies. Because Federal facilities can more easily and safely serve as laboratories for assessing the effectiveness of environmental equipment, processes, and techniques, Federal facilities offer unique opportunities for both the development and application of innovative technologies and approaches to investigation, remediation, source control, and pollution prevention.

EPA is working to establish Federal facilities as test centers for innovative technologies for site investigation, remediation, and pollution prevention. At McClellan Air Force Base, EPA, the State of California, and a number of Fortune 500 companies have been collaborating to measure the performance of a number of innovative technologies for remediation. We are also proposing the establishment of public/private partnerships at a number of other Federal sites.

The Federal strategy and interagency coordinating process set forth in Deputy Director Rivlin's statement provides an Administration framework to overcome the previous shortcomings in goal setting, planning, coordination, and environmental leadership by the Federal Government. EPA looks forward to providing active support to OMB and the Office of Environmental Policy in implementing this strategic approach to the waste management and cleanup problems of the Federal Government.

This concludes my remarks, and I would be happy to answer any questions you may have.

Senator LEVIN. Thank you, Mr. Herman.

You made reference near the end of your statement to the use of innovative technologies at Federal facilities when they are being cleaned up. Can you comment on whether or not there is going to be or is a systematic incorporation of these innovative research and development technologies into compliance agreements affecting Federal facilities? Are you trying to find a systematic way to incorporate those technologies?

Mr. HERMAN. That is one of the things that we are looking at, and we are in the nascent stage right now, but assuming that we develop technologies that could be applied in other places, they could be incorporated to apply to specific problems.

Senator LEVIN. One of the major goals that EPA has with respect to Superfund is to recover its costs from responsible private parties. But in the case of Federal facilities, that particular issue isn't relevant. Yet the system which is imposed on Federal facilities seems to contain requirements, particularly relating to characterization of sites, that don't seem necessary because they are meant to prove liability in a courtroom when we know already who is liable and who is going to pay—we are.

Are you taking steps to streamline the Superfund characterization requirements that are not relevant to cleanup of Federal facilities?

Mr. HERMAN. At the present time, Senator, the Administration is going through the overall Superfund reauthorization process, and we have interagency groups studying the problem. There is a specific group that is working together addressing the problems of Federal facilities, and that is one of the issues that is being looked at. There is a heavy emphasis at this point being put on streamlining all of the procedures to try and speed up cleanup both at military bases and at other facilities.

Senator LEVIN. What is the timetable for that group?

Mr. HERMAN. The group hopes to complete its deliberations, I believe it is by the end of October.

Senator LEVIN. This year?

Mr. HERMAN. That is correct.

Senator LEVIN. We have learned to ask that question on this Committee. [Laughter.]

Last year, the Committee held a hearing at which EPA revealed in a preliminary report that there are some 45,000 sites either contaminated or potentially contaminated with radioactivity in the United States. Of that number, the Department of Energy is responsible for some 15,000 sites, but there are still no cleanup standards for radiation to address the problem.

At the hearing, all the witnesses, the Federal agencies, state officials, and public interest groups, supported the development of cleanup standards by the EPA, and funds from the Department of Energy were transferred to the EPA to begin that process. However, in the fiscal year 1994 EPA budget, no funds were requested for that activity.

What was the rationale for cutting funds that were in the previous Administration's fiscal year 1994 request for radiation cleanup standards?

Mr. HERMAN. Senator, at this point, the Department of Energy is funding the development of these standards during the fiscal year 1994. DOE is providing $8 million, $5 million in contract support and $3 million in FTE funding and 20 full-time equivalents, FTEs, to the EPA via an interagency agreement. EPA committed $3 million in contract support and 25 FTEs under the agreement.

For fiscal year 1995, the agency will be requesting funding for the development of these standards.

Senator LEVIN. Then you are acting as the agent or the contractor for other agencies instead of making this your own issue, your own project?

Mr. HERMAN. No. In fact, right now, the Office of Air and Radiation is working on and developing regulations that will set forth requirements for cleanup levels for contamination with radionuclides. We are working on it. The funding is coming from the Department of Energy.

Senator LEVIN. Who is responsible for this, will it be EPA or DOE?

Mr. HERMAN. EPA.

Senator LEVIN. Using DOE's funds? Is that the normal way agencies operate, where the responsibility is yours but the funding comes from another agency?

Mr. HERMAN. In this area, in the Federal facilities area, I am aware of our being assisted by other agencies who have significantly more resources.

Senator LEVIN. Is there an impact here, though, on the private sector as well? This isn't just an agency impact, there is a private sector impact as a result of your taking responsibility in this area. I am not sure why it is that you need these interagency transfers instead of just putting it in your budget and leaving it out of the DOE budget, since you are responsible for it, and since it has a private impact.

Can you take that up with OMB, as to why it is being done that way?

Mr. HERMAN. Yes, we will.

Senator LEVIN. I think you testified, Mr. Herman, about the number of environmental cleanup compliance agreements. You made reference, I think you said 100-and-some?

Mr. HERMAN. A 108 or 110.

Senator LEVIN. Have these agreements been prioritized in terms of health and safety risks, and if not, would it make sense to establish some kind of a prioritization system?

Mr. HERMAN. Senator, I would like to defer to Gordon Davidson, the head of the Office of Federal Facilities Enforcement.

Mr. DAVIDSON. Senator, the question you asked is a good one and one that we have wrestled with for some time. If you boil it down, we have, of our NPL sites, 110 agreements covering 115 sites on the NPL.

The prioritization can take place in two ways. One is at the site itself, and typically what we will do with the Federal agency and the State is break the site up into pieces that make sense from a technical perspective and a risk perspective and try to address those pieces within the site that pose the highest risk first.

Where we have had problems has been trying to compare sites in different locations—a site in Colorado, for example, compared to a site in Florida. It has been a very difficult proposition to solve. We have had a number of efforts within DOE in building models that look to this prioritization effort and we have not been able to solve this one very well.

So in a sense, we are trying to do it on a site-specific basis, acknowledging that in some cases there are real emergencies that we need to take care of, but in most cases we are not at the real emergency stage. We are the long-term cleanup kind of a phase and it is much more difficult to compare risks across the country in that regard.

Senator COHEN. Would you yield to me for a question?

Senator LEVIN. I am done anyway. Senator Cohen.

Senator COHEN. It is not an emergency in the sense of a public health problem but it may be an emergency as far as the economic health of a community is concerned.

Mr. Herman talked, for example, about base closures, and both Senator Levin and I can relate to that very specifically. In our own States, we have had significant facilities close and the economies in those region have been teetering on the edge of collapse. So it is important.

I will give you Loring Air Force Base by way of example. The estimates run that it could cost anywhere from $100 million to $500 million to clean up that particular site, and the question is how do we do that and how quickly can we do that in order to allow any kind of commercial development to come in. So even though there may not be an immediate public health hazard posed by those areas, it nonetheless is a very serious public health problem in another way, namely survival economically.

Mr. HERMAN. Go ahead, Gordon.

Mr. DAVIDSON. In response to that, we agree wholeheartedly. We have worked very hard at closing bases to try to reach out to the community and to the States and try to find out what parcels of the land are of the greatest interest for development.

In the cases where we have done this, such as Pease Air Force Base in the State next to you, we have had some success and there are three or four business on there while we are continuing the cleanup. We think we can put, in collaboration with DOE, strategies in place that allow conversion while we are still doing the cleanup and not put the people on the base at any increased risk. So we are incorporating these types of strategies now.

Senator COHEN. Mr. Herman, when did EPA create the Office of Federal Facilities Enforcement? It is a nice acronym of "off," I guess.

Mr. DAVIDSON. O–F–F–E. It was formally created on Earth Day 1990, and actually, prior to that there was a hazardous waste Federal facilities office in another part of EPA that was shifted over into Steve Herman's operation. So we have been in existence a little over 3 years, 3½ years.

Senator COHEN. Do you feel you have the necessary expertise to deal with the kind of problems that you are charged with dealing?

Mr. DAVIDSON. I think we have access to the necessary expertise, to the extent that the Government has the necessary expertise. Some of the challenges that we are facing I personally believe are challenges that we are not able to solve at this point, some of the dealing with the mixed wastes, for example, and some of the radionuclide contaminations, also some of the contaminated building issues that we have in the Energy Department.

Our strategy has never been to try to build a large office but is to try to collaborate within the Government to bring the technical expertise to bear on the problems that we find. We have been able to do that with some measure of success, but there are some problems out there that, frankly, don't lend themselves to easy answers at this point.

Senator COHEN. One of the potential problems that we see, for example, with EPA you have a fairly decentralized system, and with that decentralization comes the loss of a comprehensive approach to dealing with these problems.

I was wondering, Mr. Herman, or any of your associates who are with you, if you could perhaps comment on how you intend to reconcile that decentralized approach that EPA has had over the years with the region really responsible for much of the activity in those regions and coordinating that at the Federal level. That is one of the things that has been lacking in terms of a comprehensive strategy to coordinate much of these activities.

Mr. HERMAN. Senator, I think you raise a very good point. I have only been at EPA approximately 2½ or 3 months, and the problem which you have raised is readily apparent.

I would say that approximately a month and a half ago, the Administrator announced her intention to reorganize the Office of Enforcement, which includes the Office of Federal Facilities Enforcement, and to consolidate, at least at headquarters, all of the enforcement functions which had been dispersed throughout the agency. I think that something like 60 or 70 percent of the enforcement budget was not actually in the Office of Enforcement.

We are at the stage where we have had a very extensive process within and without the agency to examine various organizational structures. The Administrator expects to announce a decision on which structure she is going to choose for the Office of Enforcement, probably within 2, 2½ weeks. At that point, we are going to take a look at the relationship with the regional offices to see what changes, if any, have to be made at that point to make them compatible with the new structure at headquarters.

I would say that one of the primary purposes that the Administrator had in announcing her intention to carry out the reorganization was to try and implement a coherent and a cohesive enforcement policy, so that enforcement spoke with one voice and so that all the efforts were in the same direction, whether they were carried out in Boston, Denver, or Washington. My great expectation is that the reorganization is going to go a long way towards that.

Senator COHEN. Thank you, Mr. Herman.

Mr. Chairman, I think the benefit of this particular hearing is to really draw everyone's attention to the nature of the problem. I don't expect any of you to come up here with any solutions to it at this point. We don't even know the depth of the problem, as Senator Levin was saying. The bottom line is that there is no bottom line.

That reminded me of one of Nietzsche's observations. He said, if you stare at an abyss long enough, eventually it begins to stare back. It strikes me that that is the nature of the problem that we are confronting.

This hearing has been called to try to at least ventilate the issue, to raise it to the public's consciousness. The magnitude of the problem will sensitize all of us who are concerned about the issue. We have to take very coordinated, efficient, and expensive action both inside and outside of Government to provide some remediation for the nature of the problem that is confronting us.

This is something that is very serious, and the amount of money that is involved, I think, has not been elevated to our consciousness in any significant degree. We have to start talking about it and we have to start paying for it.

I didn't expect you, Mr. Herman, to come forward after only a few weeks on the job with any kind of solutions right now, but I think by us focusing upon it you will understand that we are going to followup and continue to have the oversight of the issue.

Thank you, Mr. Chairman.

Senator LEVIN. Thank you, Senator Cohen.

What efforts is the EPA going to make to address worker safety and health risks in environmental compliance agreements with Federal facilities?

Mr. HERMAN. Senator, we consider the issue of worker health and safety to be extremely important. As you know, at this point Federal facilities are not covered by OSHA. However, we and the other members of the Administration are intending, through the group that Dr. Rivlin introduced this morning, to address this problem.

Senator LEVIN. In July of this year, the GAO issued a report which found that the EPA as of December of 1992 had completed evaluations on about 500 of the 823 potentially-contaminated facilities that were put on the original docket in 1988.

Since that time, the Federal facilities Superfund docket has grown to almost 2,000 sites, and there is a backlog of unevaluated facilities that could result in increased health risks and cost overruns.

Again, go through the steps that EPA is taking to address that growing backlog. Summarize that for us.

Mr. HERMAN. Let me just defer to Mr. Longest on that, who is directly involved in that process.

Mr. LONGEST. Yes. The listing process, whether it is Federal facilities or the rest of the Superfund sites, in other words, the 37,000 sites that are in our CERCLIS inventory, have all been put into the process to deal with the preliminary assessment and site investigation. The problem we have run into, not just at Federal facilities but at all those sites, is that there are a number of sites that have not been addressed at this point. Again, this is not just a Federal facilities problem but a problem of dealing with the entire Superfund inventory.

What we have tried to do with the resources we have is work directly with the Federal agencies to ensure that the information they provide us is useful in the form that they provide it so that we can go directly to the listing process.

The Federal agencies are the ones that do the actual assessment of the site. That is the preliminary analysis, which is mainly a paperwork review and a site investigation, which is where they go out and actually collect data.

Senator LEVIN. You say those guidelines and directions have been issued to the agencies, to those other agencies?

Mr. LONGEST. We have been working with them in a cooperative manner. I don't think we have the authority to issue a guideline saying what they must do. It is a cooperative-type venture.

Senator LEVIN. I thought you made reference to some kind of reference there.

Mr. LONGEST. Oh, I beg your pardon. We have guidelines for initiating and completing a preliminary assessment and a site investigation at all sites.

Senator LEVIN. Whether they are Federal or not?

Mr. LONGEST. Yes, sir.

Senator LEVIN. Is this the same guidance for Federal as it is for private?

Mr. LONGEST. That is exactly right, sir. That is the guidance I was referring to that we provide to them, since they do the actual assessment at the site when it is a Federal facility, whereas we do it at a non-Federal facility. So we have given them our guidance and asked them to provide the information in a format that we could use directly. If that is accomplished, that could help speed up the process.

Senator LEVIN. In 1991 and 1992, the EPA cited Federal facility enforcement as a material weakness in its Federal Managers Financial Integrity Act reports. EPA said that it didn't have sufficient resources to adequately oversee other agencies' cleanup activities.

According to the GAO report, the officials in EPA's assessment program office said that they had requested additional funding in fiscal years 1993 and 1994, but the Administrator did not forward that request to the OMB.

Can you explain to us why the request for additional funds was not forwarded to the OMB?

Mr. HERMAN. Let me address that in two ways, and then I will ask Mr. Longest to address another part.

One of the elements of the report which addressed the Office of Enforcement in particular was our oversight of the base closure question, and in response to that, what we have done is we have worked very, very closely with the Department of Defense and OMB to try and get significant numbers of additional personnel and money at EPA so that we can carry out that program. So we have addressed part of that problem.

With regard to the other part of your question, it is my understanding that—I will let Mr. Longest answer it, but I am not quite sure that the report or the characterization of the report is accurate.

Mr. LONGEST. Yes. The report, I believe, spoke to requests for specific resources to deal in the area we refer to as the preremedial program not being forwarded by the Administrator at that time to

OMB. The budget isn't prepared exactly that way. In other words, we go in with a total budget for the Superfund program and it has several elements in it.

The bottom line is that decisions have to be made on what are the priorities in the program, and the priorities in recent years have been at the end of the pipeline because of the lack of actual accomplishments of cleanup, which have been improved—we are up to 184 sites cleaned up now. What we are saying is we have put more emphasis on that end of the pipeline rather than spending time to put more projects on the NPL when we are having trouble keeping up with the workload that we currently have.

So it was a matter of making decisions on priorities, whether you should put them into the construction end and construction completion or whether you should put more into the listing process.

Senator LEVIN. The GAO recommends that the EPA Administrator, in consultation with other agencies, develop a Superfund plan to address the backlog of unevaluated Federal facilities that remain on the docket. The GAO recommended that one, the plan should specify first the steps that EPA would take to streamline the assessment and evaluation process; two, a schedule for completing Federal facility assessments and adding to the national priority list those facilities which pose the greatest harm; and three, the level of priority and resources that EPA plans to devote to the effort.

The GAO also recommended that this plan should be completed in time to be considered by the Congress during the upcoming Superfund reauthorization, and that could go a long way towards solving this problem.

What do you think about that?

Mr. HERMAN. The agency agrees with the recommendation, Senator, to develop such a plan to address the backlog of the unevaluated Federal facilities remaining on the docket.

Our only concern is that we cannot do it all by ourselves. We have to work, and we are trying to work, closely with the other Federal agencies. In the past, some of the process has been slowed because of the quality of the data that has been generated and other similar problems, but we are in full support of the recommendation.

Senator LEVIN. Senator Cohen asked Dr. Rivlin a question about contractors that have contaminated Federal property and what actions EPA takes and whether or not they are eligible to get a contract for the cleanup. Did you hear that question?

Mr. HERMAN. I did.

Senator LEVIN. What is your comment on that?

Mr. HERMAN. My comment from an enforcement perspective is that if we know and have found that the contractor has violated the law, there are sanctions that can be levied against the contractor. We have suspension and debarment contractor listing type penalties, and if it is appropriate, that is what should be done.

Senator LEVIN. But what about the same contractor getting a cleanup contract after the same person has contaminated the property improperly. Could that happen?

Mr. HERMAN. Could it happen?

Senator LEVIN. Well, should it happen?

Mr. HERMAN. It doesn't sound like it should happen. I think we would have to look very closely at the circumstances.

Senator LEVIN. Can you do that and get back to us so we can clear that point up? Under what circumstances could a contractor who improperly contaminated property be knowingly awarded a contract for the cleanup?

Mr. HERMAN. I will.

Senator LEVIN. Senator Cohen.

Senator COHEN. I have no further questions.

Senator LEVIN. Mr. Herman, we wish you well on your new duties. Thank you for coming, with you and your colleagues. I know that a family member of mine, who is an old friend of yours, would want to join me in wishing you well on those new undertakings of yours.

Mr. HERMAN. Thank you very much.

Senator LEVIN. Thank you. Thank you all.

Our final panel, we have three witnesses. They are Tom Grumbly, Assistant Secretary for Environmental Restoration and Waste Management of the Department of Energy; Sherri Wasserman Goodman, Deputy Under Secretary of Defense; and Michael Heyman, the Deputy Assistant Secretary of the Department of the Interior.

Mr. Grumbly, did I pronounce your name correctly?

Mr. GRUMBLY. Yes, Senator, you did. I try not to be most of the time.

Senator LEVIN. I think we will be starting with you, according to this list. Please proceed.

TESTIMONY OF THOMAS P. GRUMBLY,[1] ASSISTANT SECRETARY FOR ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT, U.S. DEPARTMENT OF ENERGY

Mr. GRUMBLY. Mr. Chairman, thank you very much for the opportunity to appear before the Committee to discuss the significant challenges that face the Department of Energy's environmental restoration and waste management program.

I am particularly pleased to appear with my other colleagues from the other Federal agencies, including Deputy Director Rivlin, our colleagues from the Environmental Protection Agency, and from the Department of Interior and the Department of Defense.

As you heard from Deputy Director Rivlin, we are working together, and I think the Clinton administration is committed to working together on an interagency group coordinated by the White House and the OMB to develop the Administration's position and strategy on cleaning up these waste sites, as well as dealing with our overall Federal facilities problem.

I have a lengthy statement that I would like to submit for the record and I would like to just summarize, if I could.

Senator LEVIN. Thank you.

Mr. GRUMBLY. What I would like to do is really hit eight points during the few minutes that I have. First, I would like to talk briefly about our priorities and our strategy for moving forward, because I think everybody is concerned about how we have been spending the public's money.

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[1] The prepared statement of Mr. Grumbly appears on page 64.

Second, I would like to talk a bit about managing our compliance agreements, summarize some new approaches to long-term environmental management, give you some ideas about how we are going to improve our management budgeting and our productivity, how to deal with contractor accountability, something that you have already brought up, how we are going to retool and retrain in the DOE complex, talk a little bit about a major problem in facilities transition that relates to the issue of how deep that abyss is that Senator Cohen was talking about, and finally, talk a little bit about the major risk in the system that we have, the tanks full of high-level radioactive waste that, as the Senator indicated, would fill up a lake in Manhattan.

Three months ago, in my confirmation hearings, I indicated to the Senate Armed Services Committee and the Senate Energy Committee that I would be getting back to them concerning our priorities, and what I would like to do is to submit for the record, if I could, a document that I think that the Committee was provided this morning, and that is a summary of the presentation[1] that I made to Secretary Hazel O'Leary and that she has agreed to that lists in detail the six major priorities, our performance measures, how we intend to get there, so that you and your colleagues in the Senate and the House can measure the results that we are likely to get.

I think that we are in a new era with reinventing Government, with the national performance review, and that you and everybody else deserves to know exactly what it is that we hope to achieve, and we can talk about that later, if you want.

Senator LEVIN. We will make that part of the record. Thank you.

Mr. GRUMBLY. Thank you very much, Mr. Chairman.

The second thing I would like to talk about briefly is how we are going to manage our compliance agreements. As the EPA indicated, they have 104 different agreements signed with various Government agencies. We have 93 of those agreements ourselves. The challenge of our office in DOE is an extremely difficult task to deal with those problems.

We have made some good progress since we have been established, but there are many areas in which we must do better, especially determining the health and environmental risks at our facilities and addressing the eminent risks first. I have detailed in my written statement actions we are taking.

As you know, the structure for much of our work is incorporated into environmental compliance agreements among DOE, the EPA, and the States. We take seriously the commitments that are embedded in these agreements. However, we know that some cleanups can be accelerated ahead of schedule while in other cases the problem is larger, more complex, or simply different than we originally expected.

The existing agreements that we have were based on the best information available at that time, and we are now in the process of renegotiating with EPA and the States within the terms of those agreements, although I want to emphasize that we are dedicated to honoring our obligation to restoring the health and environment and to protecting the health and safety of our citizens and our workers.

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[1] The briefing document referred to appears on page 76.

But I think it is important to understand that these 92 compliance agreements, Mr. Chairman, shape our responsibilities tremendously, and if they lock us into old ways of doing business we simply have to renegotiate them, concurrent with the States and with the feds, with the Environmental Protection Agency, to get out of things that no longer make sense.

The third area I would like to discuss are some new approaches to long-term environmental management. Our environmental restoration and waste management program must learn from the not altogether positive experience of EPA's Superfund and other cleanup programs. The problems are larger than most people predicted. Hence, we must make more use of interim remedies to stabilize contamination and invest in research and development needed to find long-term solutions.

You are demanding real progress, the public is demanding real progress, and we are committed to making progress on the ground. In order to do that, we have to get out of the study phase much faster and start accomplishing things at the sites.

The fourth area I would like to address is how to improve our budgeting, reducing costs, increasing our productivity, and developing some long-term cost estimates that we talked about. As our program changes as a result of defining the extent and complexity of contamination at our sites, we have faced rapid cost increases.

The program's fiscal year 1994 budget request of about $6.5 billion was roughly 18 percent greater than the fiscal year 1993 budget appropriations and more than three times the first fiscal year budget in fiscal year 1989.

Responsibility for this level of resources requires that we demonstrate efficiency, productivity, and solid results. We must and we will demonstrate that our program funds are being used as efficiently as possible in order to have the credibility necessary to receive needed resources or to renegotiate our agreements. What we hope is that by setting forth the kind of performance standards and the kind of objectives that we gave to you just a few minutes ago, that we will be able to demonstrate to people our commitment for achieving real results.

Fifth, we have some initiatives for contractor accountability. They have begun; there is a lot more to come. We are more reliant on contractors than any other agency in the Federal Government, and the environmental restoration and waste management program is now the largest program in the Department of Energy.

In May of this year, Secretary O'Leary announced a sweeping set of initiatives to increase DOE contractor accountability, and although deficiencies, I think, still exist in our area of contractor accountability, we are making progress in several areas and I would be happy to talk to you about them.

One of the areas is in our environmental restoration and management contractors. The question has been raised about whether people who have been responsible for dirtying-up these sites ought to be responsible or should even have the chance to work at them in the future.

One of the things that we are doing is we are clearly moving away from the traditional management and operating contractors towards a new form of contractor, in which people who are really familiar with environmental contracting are actually being asked to participate at our sites. Our new environmental restoration and waste management contractors include contractor liability provisions of the Department's new accountability rules.

One example of activity under this contracting initiative is the Fernald Environmental Restoration Management Corporation, the contractor for the Fernald environmental restoration and waste management project in Ohio, which assumed full responsibility for the Fernald site on December 1, 1982 [sic].

We are also planning a number of initiatives to improve contracting procedures. These are detailed in my written statement and include greater use of DOE Federal employee staff for project management as well as contract administration revisions, including limiting the length of our contracts for services to 5 years.

One of the big problems we have, Mr. Chairman, in a system that is as highly leveraged as we are between Federal employees and contractors is, frankly, we don't have enough of our best troops down at the firing line so that they can actually manage the contractors that are out there, and we simply have to address that problem.

The sixth area I would like to briefly address is retraining and retooling the DOE complex. Just as the Department is concerned about preserving the health and safety of workers performing cleanup activities, we are also vitally concerned about the economic health of the communities around the sites and facilities and providing work opportunities in the environmental restoration and waste management program.

As a result of legislation cosponsored last year by Chairman Glenn, the Department has established a task force with guidance directly from the Secretary's office to accomplish this crucial mission of worker and community transition. My written statement details the ways in which we are proceeding on training.

The last two areas I want to address are facility transition as well as the issue of tank safety. In the wake of the end of the cold war, and this is, I think, an important point, thousands of former nuclear weapons facilities will require decontamination and decommissioning. We have this gigantic complex that is building down. We have thousands of buildings that are metal, by and large, that are contaminated by chemical hazardous wastes as well as radionuclides.

To deal with the massive changes in the DOE complex, we have established an Office of Facility Transition and Management within the environmental restoration and waste management program. This is sort of a hidden part of our budget at the moment. In fiscal year 1994, it is about $700 million, but as the defense complex builds down, we shouldn't kid ourselves that there aren't going to be substantial costs of cleaning up.

So when we talk about producing a baseline for cleanup, one of the big uncertainties is wrapping our arms around literally the thousands of buildings that are going to have to come into the DOE cleanup process.

Your colleagues over in the House, and I think you will probably agree to them in the Senate, have asked us to undertake a baselining of that problem during the next year so that we can report back to you about what we think, within a certain range, how big this facilities transition problem is likely to be.

Finally, I would like to briefly discuss a new technical strategy for dealing with the high-level radioactive waste tanks at Hanford, Washington, safely managing and disposing of the 61 million gallons of mixed liquid high-level radioactive waste stored in 177 underground tanks at the Hanford site. It is probably the most serious challenge facing the Department.

We talked about how this budget has gone up three times in the last 4 fiscal years. Let me give you a sense. In 1989, we finally figured out that we had major risks at the tanks in Hanford, Washington. Either that or it was revealed. I suspect people knew about it, but it was finally revealed in 1989. In that year, we were spending $22 million, Mr. Chairman, to deal with those tanks. This year alone, we will spend $600 million to make sure that those tanks don't further degrade and to deal with the safety problems that we have identified.

We have a major potential public health and environmental problem out there. In my estimation, and I have been working on environmental policy for the last 20 years, it is probably the single worst environmental risk in a point base in the entire Nation, and we have to take that seriously.

Mr. Chairman and Senator Levin, you have done a great public service, I think, by helping to highlight the Hanford tanks as a problem. We are committed to a fresh look at this.

In addition to what I have announced today, the Department is working with the Defense Nuclear Facilities Safety Board to design a new program that will address the safety of the high-level tanks.

Thanks for the opportunity to address your Committee. We look forward to answering your questions.

Senator LEVIN. Thank you, Mr. Grumbly.

Ms. Goodman, you will be next. Before you begin, though, let me just thank you. We just received notice on another matter that interim policy has been adopted by the Department of Defense relative to personal property being kept in place on bases and facilities for possible reuse, the facilities and bases that are going to be closed, for possible reuse by the communities. That is a very important notice to those of us that face additional base closings this time around.

You and I have talked a great deal about this. You have come through with a good policy, and we thank you for it.

Ms. GOODMAN. Thank you, Mr. Chairman.

Senator LEVIN. Would you like to proceed, please?

TESTIMONY OF SHERRI WASSERMAN GOODMAN,[1] DEPUTY UNDER SECRETARY OF DEFENSE (ENVIRONMENTAL SECURITY), OFFICE OF THE SECRETARY OF DEFENSE

Ms. GOODMAN. Thank you and good morning. I am also pleased to be here with my colleagues from the other Federal agencies, the Office of Management and Budget, the Environmental Protection Agency, the Department of Energy, and the Department of the Interior.

I am honored to be here with you today as the new Deputy Under Secretary of Defense for Environmental Security. I will summarize briefly my statement, which I ask to be submitted for the record, and I will address for you this morning the following points: The Department of Defense commitment to the environment, our new environmental program, our approach to cleanup, and specifically the fast-track cleanup program for closing bases, on which we have already worked together, and our collaboration with other Federal agencies.

As you know, Mr. Chairman, my position is a new one at the Department of Defense. Its creation by Secretary Aspin signals the importance he attaches to the environment and to the defense infrastructure, which is essential to maintaining a healthy environment.

By creating this new position, he is demonstrating his belief that environmental security, including the effective management of environmental programs, is a high priority for the Department of Defense.

Our environmental security programs at the Department of Defense include four parts: Cleanup, compliance, conservation, and pollution prevention. This hearing has been focused largely on cleanup, and that is the area to which I will direct most of my remarks.

However, I do want the Committee to understand that we consider at the Department of Defense environmental security to include not just the past but also the present, current compliance, conservation of our natural and cultural resources, including energy conservation, and very importantly, the future, pollution prevention. I call it preventative medicine for the environment.

It is also quite important to our acquisition reform efforts, in which I know you are quite interested, Mr. Chairman, because it allows us to ensure that as we are taking steps to reform our acquisition system, we are incorporating sound environmental considerations into the way we buy our weapons and build new buildings.

Cutting across these four areas is technology, which is important to everything we are trying to do.

The Department of Defense is responsible for environmental contamination resulting from decades of operations, both in the United States and overseas. The most common contaminants are fuels, solvents, and toxic and hazardous waste. There also exists unexploded ordinance and some low-level radioactive waste, such as electron tubes, gauges, and circuit breakers.

Since the Defense environmental restoration program was created in 1984, the Department of Defense has devoted about $6.5

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[1] The prepared statement of Ms. Goodman appears on page 117.

billion to that effort. Substantial additional monies will be needed, and there is no question in my mind that we have to change the way we are doing business today to overcome what I call the paralysis of analysis problem.

We need to get beyond studies and into actual cleanup. To do that, we need to focus on identifying and performing interim measures to reduce risk at environmental hot spots, to increase our use of emerging technology to solve problems, and to put more senior management attention on contracting techniques, project management approaches, and regulatory impediments.

The only way we can do this is to involve our major stakeholders, the Congress, the regulators, both Federal and State, industry, and the public in the decision-making process.

I would like to spend a few moments talking about the fast-track cleanup program for closing bases, which is where the Department has put its effort to change our environmental activities to meet the post-cold war challenges.

The Department has begun a new approach to cleanup. This was initiated by the President's message of July 2 to speed economic recovery of communities where military bases are slated to close. Rapid redevelopment and creation of new jobs in base closure communities are top goals of this new initiative. The fast-track cleanup is an important part of this initiative and includes the following key elements.

First, a partnership with our regulators. We are creating cleanup teams at every closing base, involving the military, the Environmental Protection Agency, and our State regulators. In an unprecedented effort, the Department of Defense is supporting EPA and the States through the provision of funds and to the EPA through the provision of full-time equivalents.

The second piece of this involves speeding up the process to conduct environmental reviews, particularly the reviews required by the National Environmental Policy Act. The Department will now prepare a single so-called NEPA document for the new use of the property and is committed to completing these documents within 12 months from the day the community submits its final reuse plan.

Let me say that the community involvement here is critical. We are very focused on meeting the community's needs and having the community determine the future use of the land and designing a cleanup program that meets with that future site use.

The Department has also made an unprecedented effort to involve the public. It is establishing restoration advisory boards to involve the local community, encourage public comment, and to work closely with the cleanup team.

Next is a process you well know. It is called parcelization. What we are doing is identifying the clean parcels as quickly as possible to make those available early by sale. For contaminated parcels, we will use a lease, and we have worked out model lease provisions with the Environmental Protection Agency to make even the contaminated parcels available earlier.

As you probably know, Mr. Chairman, under present law, the contaminated parcels cannot be sold until the remedy is in place.

That is pursuant to the Superfund laws and is an issue you may be considering next year in the Superfund reauthorization.

And finally——

Senator LEVIN. It is just on that narrow point that you and I have spoken about before. One of the problems in the leasing of contaminated parcels is the liability issue. I think you were going to take a look at that, so that these lands and properties could be leased without the State accepting the liability thereon.

Ms. GOODMAN. You gave me a great lead-in to my next point, Mr. Chairman.

Senator LEVIN. Oh, I thought you were leaving it at that.

Ms. GOODMAN. The next point is just that, that the Department has now within the last couple of months fully accepted the responsibility for contamination at closing bases that it has caused and will not attempt to pass on that liability.

Senator LEVIN. Even during an interim lease?

Ms. GOODMAN. That is right. It will make available by way of an indemnification to future occupants and lessees of that property, pursuant to provisions included in the defense authorization bill and a policy promulgated by the Department several months ago, that protection to future occupants of property in closing bases.

Senator LEVIN. And not just future occupants, we are talking about the occupants during interim leases? Is that what you mean by future occupants?

Ms. GOODMAN. That is correct, yes.

Senator LEVIN. Great.

Ms. GOODMAN. Occupants whether by lease or by sale.

Senator LEVIN. Great. Thank you.

Ms. GOODMAN. We believe strongly that the elements of the fast-track cleanup program have great promise, both for cleanup of nonclosing bases at the Department of Defense and for our other Federal agency partners, and we will be working closely with them in OMB's interagency task force to make available to them the tools that we have developed for closing military bases.

Let me speak for a few moments about the challenges we do face in the future and areas where I believe the interagency task force will be useful for the Department of Defense in areas where we have common problems.

First is risk. We need to have a better understanding of the environmental risk at all our sites so that we can create and target our priorities.

Second, we need a common definition and standards. We need, as Mr. Grumbly said, common performance measures. I have not been sufficiently satisfied with those, even at the Department of Defense, although I think the Department of Defense in many ways is farther along in its cleanup program than the other Federal agencies. I believe there is more that we can do and we are planning to do so that we can provide to you a scorecard of how well the Department of Defense is doing.

Cost estimating, we need to understand that better and have a Department-wide methodology for accurate and uniform cost estimating and projection. I have created a task force on environmental funding that is looking at ways to improve our requirements process and to build an integrated planning, programming, budgeting system for our cleanup activities.

Next are contracts. In the past, the Department awarded contracts separately for each phase of the cleanup program, one set of contracts in the study phase and another set of contracts as we moved into the actual cleanup phase. This series of handing off the contracts has presented problems in terms of time and money and redundant efforts.

To meet these challenges, the Department is now looking and is about to award the first of what are called "Total Environmental Response Contracts," which would permit one contractor to do a full turnkey operation, that is from preliminary assessment to remedial action.

Since we do believe that the costs in the cleanup program will—they have historically increased in the Department of Defense from $150 million in 1984 to a request this year of $2.3 billion, that is of an overall environmental security budget in the Department of Defense of over $5 billion now, but we believe there are several things that we can do to more efficiently invest our resources.

They are to consider planned or proposed land use as cleanup standards and remedies are developed; more efficient and competitive contracting; third, to stabilize the hot spots immediately, using interim remedies; fourth, to streamline the site characterization and remedy selection process wherever possible, and that is because, as you said, Mr. Chairman, the Federal agencies do not have this issue of liability and therefore we should be able to do the study phase more quickly; and a continuous process improvement and search for cost reduction methodologies, such as benchmarking, and an active pollution prevention program. I believe investments that we make in pollution prevention now can be leveraged into the future to help us overall.

Finally, the public involvement is very critical to the program overall, and that is why we have made an active effort to involve the public at all our sites. We are working with the military departments to develop implementation strategies for recommendations developed by the Federal Facilities Environmental Restoration Dialog Committee, also known as the Keystone Committee. These include giving the public more information, revising community relations plans where needed, active public involvement in the decision-making progress, and establishing restoration advisory boards.

Finally, let me just say that I believe education and training are key to all of this. People come first. People have always been an important part of our military, and I believe that we need to improve our education and training programs throughout so that the technical knowledge of our DOD employees is adequate to deal with these challenges. So we are working on developing an integrated training and education program across all the services and to ensure that, for example, even all our military academies have environmental programs.

In closing, I just want to emphasize the Department's commitment to environmental cleanup. We believe that the fast-track program for closing bases has great promise for the Department of Defense programs and perhaps throughout the Federal agencies.

This concludes my remarks, Mr. Chairman.

Senator LEVIN. Just before we move to you, Mr. Heyman, on the narrow part of the base closing again, since this is such a site-specific question, let me interrupt to ask it now, Ms. Goodman.

The cleanup of bases frequently take a lot longer than they are expected to. That can create problems for the reuse of those facilities by the local communities, even though they are allowed on an interim lease basis now to use, at least in some instances, contaminated sites.

We have lost now two bases in 2 years, our last two Air Force bases in Michigan, and both have soil and groundwater contamination. Because of their location, which is fairly far north, they have shorter work seasons, so that when they finally can get to the actual restoration, there is a shorter period of time each year for the northern bases to get that restoration accomplished.

Can you take some steps to accelerate the assessment and evaluation of cleanup of those bases in the northern part of our land so that the shorter work seasons do not, in effect, penalize them and put them farther behind other bases? Would you take a look at that and let us know for the record whether you can do something to address that problem?

[Subsequently, the following information was furnished.]

CLEANUP ACTIVITIES

The solution is to schedule required cleanup events in order to use every available workday. From my perspective, it is important that Congress and the Department provide a reliable and timely funding stream to the installation cleanup program managers. The program managers can then work to get contracts in place to support milestone schedules that are agreed to by the installation and the regulators. This delicate coordination can only be achieved through continuous communication and cooperation among key stakeholders. At each base scheduled for closure, we are establishing environmental cleanup teams made up of DOD, Environmental Protection Agency, and state representatives empowered with decision-making authority to expedite the cleanup process. Where these concepts are in place and team members are working to implement mutual goals and milestones, they have demonstrated the ability to adapt to the construction season.

Ms. GOODMAN. Yes, I certainly will, Mr. Chairman. Let me say that we have asked the cleanup teams that are beginning their work now at all the closing bases to by March of 1994 have reviewed from the bottom up all the environmental activity and conditions at that base and to have put together a plan that can be commenced immediately to accelerate the cleanup at that base. So we will——

Senator LEVIN. That applies to all the bases in the country?

Ms. GOODMAN. That applies to all the closing bases.

Senator LEVIN. To all the closing bases.

Ms. GOODMAN. All the closing bases, and we will look specifically at the bases——

Senator LEVIN. The northern bases that have a shorter work season.

Ms. GOODMAN. Yes.

Senator LEVIN. Thank you.

Mr. Heyman.

TESTIMONY OF MICHAEL HEYMAN,[1] DEPUTY ASSISTANT SECRETARY, POLICY, MANAGEMENT AND BUDGET, U.S. DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY JONATHAN P. DEASON, DIRECTOR, OFFICE OF ENVIRONMENTAL AFFAIRS, USDOI

Mr. HEYMAN. Senator, it is a pleasure to be here.

The Department and myself are kind of new fellows on the block with regard to making presentations of this sort. I joined the Department of the Interior about 3 months ago as counsel to the Secretary and Deputy Assistant Secretary for Policy, and in that latter assignment, the Office of Environmental Affairs reports to me, and the Director, Jonathan Deason, is sitting behind me and will help me with some questions if they come later.

Our written testimony seeks to give the Committee a comprehensive view of the scope of the cleanup challenges for Interior. I would like to submit that for the record.

It shows that it is difficult to evaluate both the extent of the required cleanup and the liability of the United States for such required cleanup. We go into some detail, largely, because as I indicated, this is one of the first opportunities that the Department has to discuss its hazardous waste problems with Congress. We have been overshadowed in the past by DOD and DOE, but we seem to be emerging from that shadow, thanks to many reports, not the least being this Committee's report that was just issued.

First, to the extent of the problem, we have 432 sites on the Federal facilities compliance docket. Those, as you know, are Federal facilities that generate and dispose of hazardous waste or contain known contamination.

This number is challenging, but not quite as great as it might seem, because in the case of the Bureau of Land Management, which manages the lion's share of Interior's land, each site is counted. That might be a mine site or a landfill. For other agencies, for example, DOE and DOD, the count is of facilities which may contain many sites.

Only some of our sites will require extensive cleanup. Our written testimony indicates progress by bureau in addressing these sites.

But these 432 sites did not exhaust the potential. The number will rise as we continue extensive inventory efforts. Some of these inventories are well along; others are not.

Most significantly, this summer we organized ourselves for the first time to accomplish a Department-wide inventory and prioritization system. We expect that by this time next year we will have reviewed the existing inventories of our major land managing bureaus, the Bureau of Land Management, the National Park Service, Fish and Wildlife, and the Bureau of Reclamation, put the information in a compatible format, identified gaps, and determined the means to fill them. Further, our bureaus, especially the Bureau of Land Management, will have collected additional data, and all the bureaus will have tested a prioritizing system which will permit us to focus in a timely way on our most demanding sites.

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[1] The prepared statement of Mr. Heyman appears on page 122.

Our challenges are many: Dumps and landfills, abandoned mines and mining disturbances, abandoned oil and gas wells, unexploded ordinance sites, underground storage tanks. You might ask why we are faced with such a seemingly extensive challenge. Not until 1976 did statute call for procedures to invest the Department with management responsibilities for most of the public domain. We were transfer agents. Statutes like the General Mining Law of 1872 gave individuals largely unfettered rights to enter, use, and explore the public lands. Many of our problems trace back to those times. Moreover, the extent of our lands makes supervision difficult.

Liability is also uncertain. For instance, while the Department of the Interior and its bureaus are involved as potentially responsible parties in the cleanup of a number of sites on the National Priorities List, according to EPA, only two sites on that list are listed as being DOI Federal facilities. Written testimony on this matter is extensive, but I would just like to give a couple of examples of the liability problems.

For instance, one concerns natural resource extraction sites. We did none of the extractions, although in some instances, pursuant to statute, we urged that extraction occur. Who will end up with liability is unclear.

A second concerns Indian land. We are responsible for activities on Federal land administered by the Bureau of Indian Affairs, but liability as an owner isn't clear by any means on private lands. These largely concern, for example, mining sites and dumps and landfills where the Department of the Interior has not disposed of waste itself.

A number of reports critical of our activities have been issued recently, not the least, as I indicated, is the report of this Committee, which was graciously shared with us last Friday. It cites the other reports and contains recommendations from them and additional ones from the Committee.

We have begun responding to a number of these. For instance, the Bureau of Land Management has created an extensive training program at its Phoenix facility which is producing staff better able to deal with hazardous materials management than in the past.

Likewise, as I have indicated, we are engaged in producing a systematic and uniform Department-wide inventory of hazardous material sites, while simultaneously developing measures for prioritizing the order in which we will address needed cleanup.

Our management structure, however, is at the heart of many of the criticisms. This Committee's first recommendation, for instance, urges the Secretary to establish better line management accountability regarding hazardous material sites.

As I indicated at the outset, I am a recent newcomer to the Department. I have been struck by the extent of decentralization. Interior is made up of a number of independent-minded bureaus with long histories of autonomy in management and budget. They are linked by a common interest in conservation and sensible land use, but their priorities in balancing conservation and use have been shaped by their missions and their histories. The Bureau of Reclamation, for instance, and the National Park Service are really quite different agencies.

I am not shocked by what I have found. Thirty-4 years as a professor and ten as chancellor of a quite decentralized university like the University of California at Berkeley has prepared me well.

In a context of this sort, it is a considerable challenge to address subject matters which cut across bureau lines. In the case of hazardous materials, for instance, each bureau, until recently, has largely been on its own. Thus, the Park Service has done quite well with abandoned mine sites, largely to protect the safety of its invited visitors, and the Bureau of Land Management has adopted and enforced the cyanide management policy for mining operations which has been complimented by outside reviewers.

Each bureau has kept its own inventories on its own systems, has devoted staff time within its own budget on its own system of priorities, and has sought special funding only in relation to major cleanup activities and new facilities. Responsibility for the whole waste management program, from pollution prevention to cleanup, is squarely in the hands of the line offices, from assistant secretaries to bureau heads to the hands-on managers.

The issue is, how can the Department through its Office of Environmental Affairs, aid the bureaus and assure that they are adequately performing their statutory duties, and thus the Department collectively is acting correctly.

First, one needs a decision-making structure that can influence all the bureaus to act in a coordinated way. We have such a structure now quite active, in the committee of deputy assistant secretaries representing each of the six assistant secretaries and the solicitor's office. I chair that committee. We have met three times since June and will continue to meet often.

Our first collective action of note was to assure that each bureau undertook the inventory efforts that I previously described and that a committee of senior career officers cooperated in the design of a Department-wide system. There were numerous objections. They were overridden, and USGS is now designing that system.

Second, one needs to identify and make operative other common systems that are required. As indicated in the written testimony, this is occurring for priority setting, tracking, cost estimating, and reporting.

Third, personnel in the bureaus with hazardous materials responsibility should interact with one another for all the obvious reasons. The first such meeting occurred in Denver last May. The second is being planned now, and I attended the planning session involving about 50 managers, field staff, and personnel from the Office of Environmental Affairs. Many topics were discussed.

Training is a good example. A recommendation is now being prepared that came out of that meeting to set up an interbureau task force to explore joint training for hazardous materials management, led by a lead bureau, most probably the Bureau of Land Management.

Fourth, we need a coordinated strategy to make sure that we are effective landlords of the public lands, vigorously protecting public rights. Examples include reviewing our bonding requirements and our regulations concerning user responsibilities for adequate waste management, and discussions are proceeding presently with the solicitor's office in this regard.

Finally, we need to conceive of a budgeting system that reflects the true costs of waste management, facilitates directing available funds to the highest-priority needs, and generates resources in addition to appropriations for these purposes. The budget office in Interior is helping us in this regard.

We have a lot of work to do to get ahead of the curve in dealing with hazardous materials that pose threats to both humans and the environment. The Secretary takes this responsibility seriously. His recently letter of September 14 to the assistant secretaries laying out steps that need to be taken under the coordination of the OEA attest to this. He is well known for seeking to avoid train wrecks, and we will try our best to make serious progress in this regard.

That concludes my testimony, Senator, and Mr. Deason and I are ready to answer questions.

Senator LEVIN. Thank you, Mr. Heyman.

First, for DOE, there are various radioactive and hazardous surplus materials that you still have under your jurisdiction that are designated as products needed for the DOE's defense and materials production missions. They include backlogs of spent reactor fuels at various sites, some 500,000 tons of depleted uranium, hexafluoride at the DOE's enrichment plants, large amounts of materials in tanks and process lines that have shut down production facilities.

Now eventually, most of these materials, perhaps all, will have to be treated as wastes. What efforts are underway to establish long-term management plans for those materials?

Mr. GRUMBLY. You have hit upon several of the largest risks that we have in the Department. You are talking not only about spent fuel and the highly-enriched fuel but also the plutonium issues that we have in the Department. I think we can do several things. We have to tease it out.

First of all, with respect to spent nuclear fuel, partly because we have been pressured to do so by district court decisions, partly because we finally stepped up to the problem, we are looking at both new technical strategies as well as new management strategies for trying to get some of the spent fuel out of places like Savannah River and Idaho.

We have a number of situations in Savannah River and Hanford, Washington, and Idaho where we have fuel that is corroding, where it is ultimately probably going to have to be in some measure processed, and we have to figure out exactly how we can do that in a way that doesn't create more weapons-grade material, and I think that is a major technical problem that the Department has.

Your whole statement of the problem is how do we deal with this large amount of material in a way that doesn't contribute to our nuclear nonproliferation issues, and that is a major technical problem that we face.

We will probably have to, for example, run the canyons at some level down in Savannah River to deal with plutonium and other nuclear materials that are literally still inside those plants. We are probably going to have to deal with some kind of casking technology, dry casking, i.e., getting spent fuel out of the water and putting it into dry casks on ground so that we can deal with the corrosion issues better there.

And I think, finally, we are going to have to step up to the plate eventually, and we haven't done this yet, on whether we are going to declare plutonium and the other nuclear materials that we have as continuing national assets or whether we are going to deal with them as wastes.

That, frankly, Senator, is a major problem for us, because if we deal with it as waste today, we are going to enter into a bunch more of these compliance agreements because we are going to be out of compliance with RCRA. So we are going to have to continue to struggle with these kinds of issues into the near future.

But I do see some technical as well as managerial ways to grapple with it.

Senator LEVIN. In April of this year, explosions occurred at a nuclear fuel reprocessing facility at the Tompsk site in Russia, and according to a team of DOE officials who visited that facility after the accident, the explosions were triggered by a runaway chemical reaction in a tank containing acid and organics, radiation, uranium, and plutonium, in particular, a substance known as "red oil" may have been involved.

I understand that DOE has embarked on an effort to address this potential risk, since there could be several facilities, including DOE high-level waste tanks throughout the DOE complex, that may contain a similar chemical mix.

Can you tell us what efforts your office is taking to address that potential problem?

Mr. GRUMBLY. You identified one right away, which is we sent some experts over to Russia to take a look at the situation, and they did identify the source of the problem. What we are doing is taking a look at all of the tanks that we have in the system at the moment, seeing which ones have the problem that could resemble that, and then systematically, through efforts such as the tank safety initiatives that I have outlined here in some technical detail, attempting to get on top of those one by one.

I mean, we are fortunate that we don't have—relative to Russia, our level of risk that we have is substantially lower, but it is not zero and we need to get on top of it right away.

Senator LEVIN. Last month, Hanford workers without a health physicist present opened up a sealed glove box at the C–103 waste tank and then dropped a rock on a string down a drain, and that tank is believed to be Hanford's hottest tank.

I understand that the Westinghouse Hanford company suspended all but emergency work at the tank farms and has instituted a training effort for tank farm workers. As you know, this is the most recent of a series of problems affecting health and safety at Hanford that has been going on for a number of years.

What steps are you taking to assure that these problems won't reoccur and to assure that DOE officials and contractor managers are going to be held accountable in the future?

Mr. GRUMBLY. Several things, Mr. Chairman. First, we ordered the standdown that Westinghouse undertook. I happened, fortunately or unfortunately, to be on the site that day, and so we took action immediately to order that standdown.

What we are doing is over the next 3 months, every single worker that has any contact with those tanks will go through a behaviorally-based training process in which they will have to qualify to come back on the line. They will have to be tested both on paper as well in terms of their performance so that gradually, very gradually, we bring enough people back up to speed so that we feel that we have a qualified and extremely well-trained workforce out there.

This was not simply a problem of somebody doing a dumb thing, this was indicative of larger management problems that we have in the system, and so we are taking it as a management problem. We have made several relatively senior management changes in Westinghouse as a result of this. We have also changed the way in which we are managing the contractor in the sense that I think one of the big problems we have had is we identified these tanks as a problem several years ago and then we tried to gang-tackle it, and frankly, too many cooks have been spoiling the broth.

So what we have done now is to make it absolutely clear that the line of authority with respect to safety out there runs from me to the Richland office to Westinghouse, the contractor. They have clear performance standards. Secretary O'Leary last week challenged Westinghouse and told them literally, you either get your act together or we are getting you out of here.

So from a management perspective, we have taken these steps. From a behavior perspective, from the workers, we are making sure that people are trained, and we are bringing them back slowly so that we actually have workers who understand what a real training culture is like.

And then in addition to that, we have to make the kind of dollar investments that are necessary to actually get a technical handle on these problems.

Senator LEVIN. Now is that repair work that you are doing on management techniques going to address problems such as the following, which were identified, I guess, by your own investigation last fall: Workers being fearful of reporting injuries because they believe they could lose their jobs; a contractor misreporting injuries; training that consisted of telling workers, if you smell something, go to the nurse's station.

Are those kinds of deficiencies also being addressed in the steps that you just described?

Mr. GRUMBLY. First with respect to people reporting, we are making it absolutely clear to people that we are not going to tolerate the culture of fear and secrecy that has been part of the Department of Energy's legacy for the last 45 years.

Now it is going to be difficult for us to get people to believe that when they speak up, that they are not going to be subjected to any kinds of problems, but we have communicated as strongly as possible to the management of these sites, the management of all these sites, that whistleblowing is to be regarded as an honorable public activity and not as a problem, and at least for the sites that I manage, and I manage several of these sites around the system, we will take actions and change out the highest managers if we see that there are any problems.

But to follow up, the only way to change culture, this culture of secrecy that was at DOE, is really through behavioral changes. I think we could mouth at them all we want, but if we don't do the things that we are doing in response to this rock-on-a-rope incident, which is actually forcing people to demonstrate changes in behavior, both at the management level as well as on the line, and then holding them accountable through performance standards, we won't be able to change the culture.

I am not going to sit here and tell you that in 3 years we are going to be able to totally reverse what happened for the last 45, but we are going to hold people specifically accountable and we are going to reward them and sanction them appropriately.

Senator LEVIN. Despite a DOE order that site representatives be physically on the site to oversee the conduct of operations, our Committee staff was told that entry logs for the Hanford site showed that DOE personnel entered the high-level nuclear waste tank farms a total of 14 times over the past 2 years, or once about every 2 months during that period.

Is that going to be corrected?

Mr. GRUMBLY. Absolutely. Let me tell you, the problem we have is we have a significant conduct of operations problem around the system. What do I mean by that? When you go on an airliner, a commercial airliner, every time that you go on that airliner, the stewardess and the pilots follow a systematic way of doing business, even on your four-person commercial airliner. There are some things that are so important, particularly the safety considerations, that you have to follow the book every single time.

What I am afraid that we have done over the last many decades is we have gotten a little bit too comfortable living next to the tiger and we have to reinstitute some of the measures like the ones that Admiral Rickover used to take when he ran the naval reactors program to get people's attention and to make sure that as they get closer and closer, particularly to the nuclear risks in the system, they have to follow the book.

Senator LEVIN. Thank you.

Ms. Goodman, I have a couple of questions for you. All Federal agencies are supposed to report their annual pollution abatement spending to OMB as required under the A–106 process. It appears it is not working. We heard that from Dr. Rivlin this morning, and she confirmed what we already believed.

Director Panetta understated the situation when he said at his confirmation hearing that the A–106 process could be a more useful planning and budgeting tool with respect to the out-year estimates. That is a dramatic understatement.

For example, cost reporting to OMB under A–106 for fiscal year 1993 is about 100 percent less than what was actually budgeted by the agencies, and the CBO report that was referenced earlier found that the A–106 process is not well coordinated with the overall budget appropriations requested annually by each Federal agency and submitted to Congress.

Can you tell us what could be done to make the A–106 a more useful budgeting tool?

Ms. GOODMAN. I believe, Mr. Chairman, in the Department of Defense the A–106 process could be more useful if it were aligned with the Department of Defense's own planning, programming, and budgeting process.

As you well know from being a member of the Senate Armed Services Committee, the Department of Defense uses a very elaborate systems analysis method to plan and program and budget for all of its defense requirements, and that has certain time lines in it. The Department, I believe, does use the A–106 process right now, but it is not aligned with our planning, programming, and budgeting process.

What I am looking at in the context of my task force on cost estimating and planning and programming is just that issue, how can we ensure that the A–106 process fits with the so-called PPBS process. But it is an elaborate mechanism, as you well know. The PPBS process is Byzantine in some ways in its ways, although it does work, so we want to align those two systems, the A–106 process with the overall Defense Department budgeting process.

Senator LEVIN. Do you view the A–106 process as a bureaucratic hindrance or as an effective management tool, or both?

Ms. GOODMAN. I think it has been some of both, but I think it can be an effective management tool, particularly in terms of identifying what are the legally-mandated requirements and enabling the Department to have a mechanism beyond its own planning and budgeting process that indicates what are the actual environmental requirements it must meet.

I will say in this regard that I believe it is important as we look ahead to consider pollution prevention activities as central and key in that A–106 process so that they don't get considered, as sometimes they have in the past, as below the threshold of legal requirements. These are important investments for us to make, as important in some cases as our actual cleanup, and I would like to see those treated as such through the A–106 process.

Senator LEVIN. Mr. Heyman, let me ask you a few questions as well. You have, I believe, 430-some sites on the Federal facilities hazardous waste compliance docket, but the Department of the Interior inspector general reports that the potential number of sites is believed to be in the tens of thousands.

Do you agree with that, by the way? You gave some description as to why you have sites that seem to be larger in number, because there is more than one site per facility. Is that correct?

Mr. HEYMAN. Let me speak about that, that 10,000 or tens of thousands.

First of all, it is really impossible to answer that until we do the kind of inventory that I spoke of. We presently have, or at least I am led to understand, considerable information in the bureaus, in Land Management, in Reclamation, in the Park Service, in Fish and Wildlife, in the Bureau of Indian Affairs, but much of that information with regard to risks of the sort we are talking about is at the local level. It could be in the district manager's office at BLM. In some instances, it is at the State level. In some instances, it is in Washington in that bureau office.

In most instances, the reporting system and the inventorying system of the bureaus are not compatible with one another, and so the first thing that I believed we should do when I started to get into this problem, and certainly I am echoing my predecessors and my able director, is that we have to put these inventories in compatible means, so that we can look at them and look across them and make a judgment as to whether we have tens of thousands, and that is what we are undertaking.

I think we can take our existing information and put it into that format pretty fast. It is going to be tougher to get the additional information that we are going to need, but we can do that, too, over time.

Senator LEVIN. You counted facilities instead of sites.

Mr. HEYMAN. Yes.

Senator LEVIN. If you counted facilities instead of sites, I believe you said you would have a significantly smaller number than the other way?

Mr. HEYMAN. It would be in terms of the way things are reported to the docket.

Senator LEVIN. Just in terms of reporting, do you think that would reduce the number by a third, a half, a quarter? Take a wild guess.

Mr. HEYMAN. A third? What do you say, John?

Mr. DEASON. I think if we looked at it like DOD and DOE look at it, I think we would probably reduce that by a factor of 10, I would say. The problem is——

Senator LEVIN. A factor of 10? In other words, you would have one-tenth?

Mr. DEASON. I think so, Mr. Chairman.

Senator LEVIN. So if there are 10,000 sites, your wild guess—I am not going to hold you to this——

Mr. DEASON. I was really speaking to the docket sites. It is clear that there are many sites out there. We have an estimated 300,000 abandoned and active mine sites, probably about 3,000 landfills, and probably as much as 200,000 oil and gas leases. The question is, how many of those are really contaminated to the extent they need remediation, and that is the situation we have not addressed.

Mr. HEYMAN. So the point I was going to get to, Senator, is that the estimation of tens of thousands are undoubtedly true in terms of tens of thousands of sites that have to be investigated. Whether that is an estimate of accuracy in terms of ones that have to be remediated in any serious way is much more doubtful, but I can't say it is not true.

Senator LEVIN. When will you know that?

Mr. HEYMAN. When will we know that? We will get the first cut at that at a Department level, I think, by a year from now when we do what I indicated on inventory.

Senator LEVIN. So that process that you described you feel will be far enough advanced in about a year so that you could tell this Committee approximately how many of those sites would have to be remediated?

Mr. HEYMAN. I think we might have a pretty good shot at those that turn out to be the ones about which we have information, so I think we can go further than simply describing them. We can make a shot at estimating how many of those that are recorded in the inventories of the bureau will need some kind of remediation. Yes, I think so.

Senator LEVIN. That is what I meant.

Mr. HEYMAN. Yes, I think so.

Senator LEVIN. You would be able to give us a rough number, you hope, in a year as to about how many sites under your jurisdiction need remediation?

Mr. HEYMAN. I can't say how many sites under our jurisdiction, because I think that when we take a look at all the inventorying information that we have, put it into compatible form, we are going to find some places have not been investigated adequately. So for those that have not been investigated adequately, I am not going to be able to say.

Let me take it this way. Let me just use abandoned mine sites. There are 200,000 or 300,000 sites on the public lands where there were some kind of disturbances or actual mines, and we can locate those because the Bureau of Mines has from ancient records statements of where they are. But we can't make an assessment presently with regard to the need of remediation on those 200,000 or 300,000 sites.

Senator LEVIN. I am not talking about presently. We are talking about what will you be able to do at the end of the year.

Mr. HEYMAN. I think that what we will be able to do a year from now is to take some number of those and make an estimation of what the remediation needs will be, but we will certainly not be able to for all of those——

Senator LEVIN. Sort of a cross section, just a sample.

Mr. HEYMAN. A sample, I think we could do a sample.

Senator LEVIN. So you might take 500 or 1,000 or 2,000 sites and say, well, if one-third of those need remediation, and you can draw whatever conclusions you want.

Mr. HEYMAN. I would like to go a little further on that, just using the abandoned mines as an example. When we locate these all and we bring together information from a number of sources concerning them, I think we are going to be able to make judgments about, largely speaking, how big the disturbance is, where it is in relationship to population, and where it is in relationship to water courses.

I suspect as we work through our prioritization system we are going to say, this 70 percent of these disturbances are for later because they are not near population centers and they don't involve water courses. Thus, we are going to concentrate our time on 30 percent.

I think we are going to be able to make those kinds of cuts to be able to order how we proceed with regard to those matters.

Senator LEVIN. And you will be able to make those kind of cuts, you hope, within a year?

Mr. HEYMAN. I hope so.

Senator LEVIN. One additional question. Are you going to be recommending any legislative changes in this area? Does the Department of the Interior know yet?

Mr. HEYMAN. I will just mention one off the top of my head, and I am not sure where the Secretary is on this, but I am urging him.

I am urging that we create within the Department of the Interior a kind of internal Superfund, in other words, a fund, and that that fund get charged with appropriations that would obviously have to be in relationship to our estimation of need in order to get through appropriation committees.

We then get authorized, and this would require a change in legislation, to be able to recharge that fund by actively pursuing legal actions against other responsible parties and to take the fruits of those actions, put it into this fund, and have it as a revolving no-year fund.

Whether I am going to carry that in my Department, I don't know. If I do, yes, we will be suggesting legislation.

Senator LEVIN. Thank you.

Chairman GLENN. The meeting I was at over at the White House ran about 40 minutes late. I had promised Senator Levin I would be back here earlier. The meeting was scheduled from 10:30 to 11 o'clock and we just got out and I got back here as fast as I could, so I was considerably delayed.

I appreciate very much his willingness to take this this morning. I know he had to rearrange some things and then I sort of left him hanging here, so I apologize for that and I apologize for being absent this long but I couldn't help it.

I have a couple of other questions here and then we will terminate this, and if there are additional questions, I will submit them and ask for your response so we can include it in the record.

One thing I don't know that's been asked, though, what do you see from the States in getting this information together? I know my home State of Ohio has pretty good records, I think, on mines, mine sites, strip mines, and old places like that. Those are pretty much a matter of State record. Can't we use the States for a lot of this information?

I also go out to Colorado occasionally, out there to ski and so on. I know from reading the paper out there that Colorado has a big program on identifying and making sure the land sites are closed up. They have State laws that are involved with this.

Can we not get a lot of help from State records and State activity at this time?

Mr. HEYMAN. The answer to that, Senator Glenn, is yes, and there have been a lot of cooperative efforts through the Western Governor's Association in which we have been involved. You weren't here when I was describing what we are trying to do this first shot around, in terms of getting a compatible data base of all our bureaus. That data base certainly ought to be incorporated into what I am talking about to further inform what these sites are that we are concerned with.

Chairman GLENN. Let me ask about the NAS study. I don't know whether Senator Levin got into this or not, but the NAS study stated, and these are pretty harsh words, that DOI has been slow in coming to terms with its environmental responsibilities by delaying or stalling cleanup of waste sites, by not requiring reclamation of Federal lands used for mining, by not requiring plugging of unproductive oil and gas wells, by understaffing internal environmental oversight offices, and by not providing qualified staff.

Given the Department's inability to address its environmental responsibilities, what plans or programs have you implemented to provide appropriate management of environmental safety and health of all DOI's wide-ranging responsibilities?

Mr. HEYMAN. That is pretty broad.

Chairman GLENN. It is very broad, but it is almost an indictment also.

Mr. HEYMAN. Let me say this, Senator. That report was concerned with the Bureau of Land Management and the public domain. It was issued in 1992 and it was based on information probably from about 1989 through 1991. Since then, the Bureau of Land Management has done quite a bit in response to those recommendations.

I can't get much further at this moment than to tell you that they say that they have worked on and accomplished about 40 percent of the recommendations and are accomplishing another 45 percent presently, and I would be happy to submit to the Committee a precise scorecard with regard to the Bureau's response to those matters.

For instance, they have now made a study with regard to unplugged oil and gas wells. They have located them, they have made now estimates with a high confidence rate with regard to, (A) how to get them plugged, and (B) who is going to be responsible for plugging them. They have come to a conclusion that they will probably have to plug somewhere between 100 and 500 and that the cost will be somewhere between $800,000 and $5 million with regard to the costs that will be incurred by them, others being plugged by responsible parties.

Chairman GLENN. I am glad to have that report. When can we have that, or when we would expect to have that?

Mr. HEYMAN. I think we ought to be able to do that right away and we ought to get it to you within the next 2 to 3 weeks.

Chairman GLENN. All right, fine. We will look for it the 15th, how is that, so we set a date?

Mr. HEYMAN. That is fine.

Chairman GLENN. All right, good. Thank you.

Another area, recent reports show that DOI has the worst occupational safety record of all Federal agencies, in particular for exposure to hazardous materials and lost time injuries or illnesses.

Why is that record that bad, and what actions are being taken to correct those hazards to workers?

Mr. HEYMAN. Two things. Can I split the question? One is injuries due to hazardous waste and chemicals and the other one in terms of lost time.

With regard to hazardous waste, the number that is reflected in your Committee's report of 757 came out of a report by the inspector general of Interior. I looked into this in the last 2 days. The category of 757 includes chemical exposures, hazardous waste exposures, and exposures to noxious substances such as poison oak and poison ivy.

When I looked at the sources of the injury, I came to the conclusion that approximately 25 percent fit into chemical exposure and hazardous material exposure, so that number was much less. That is really a problem in our record keeping and a problem that has got to be satisfactorily resolved.

But nevertheless, it appeared to me upon investigating this that the number was an erroneous number that came from the inspector general's report.

The second, with regard to lost time from injury and illness, is absolutely correct, and we do have a very high rate in relation to other agencies of the Federal Government. I spoke with those who are in charge of this and was informed of the following with regard to the kind of remedial action that is occurring.

First of all, there had been, prior to Secretary Babbitt becoming Secretary of Interior, a senior manager in each of the bureaus appointed to be the person accountable for safety. But since Secretary Babbitt has taken over, the follow is occurring.

One is that a trend analysis is being done to try to find out with some precision the types of folk who are becoming ill and are having accidents within bureaus. In other words, are there particular jobs or are there particular patterns that are ones that have to be given particular attention?

A second thing that is occurring is that there is a proposal, in any event, for a centralized board to investigate bureaus with high rates because there really is a lot of difference in accident and illness rates by bureau.

And the third is an experiment that is going on right now with respect to charge-backs to bureaus of workmans' compensation costs that are occurring because of injuries, which ought to have a salutary impact upon management practices in those bureaus.

Chairman GLENN. It is my understanding, though, that much of the problem involves things like chemical exposure and even some radiation exposure, things like that that other departments really deal with on a routine basis much more adequately than the Department of the Interior. Why is it so bad in Interior?

Mr. HEYMAN. Senator Glenn, in terms of the observations I have made by the record keeping, I concluded that the numbers of injuries occurring from those causes were not particularly high.

Chairman GLENN. Who are the people that are having a problem like this with chemical exposure and so on? Are these people under civil service rules, or are they under contractor rules like much of DOE and DOD has with the nuclear problem, where we have these go-co operations, Government owned-contractor operated things. Is that where most of these injuries are occurring, or do you know?

Mr. HEYMAN. I don't know, but my assumption has been those are our own employees.

Chairman GLENN. OK. It appears that less than 2 percent of the problems relating to coal surface mining have been corrected since 1977, and little has been done to address noncoal surface mining hazards which continue to worsen.

What programs are in place or planned in those areas?

Mr. DEASON. For the coal mining reclamation, the Office of Surface Mining under the Surface Mining Control and Reclamation Act has authority to do reclamation activities but has very limited authority over the number of injuries and fatalities that have occurred on private and State lands, if that is the question you were getting to, Senator Glenn.

Chairman GLENN. Are there not records, or are there no safety programs in there, or are you saying that this is mainly a State and local responsibility over which you don't have jurisdiction?

Mr. DEASON. It is the latter. We have very limited authority currently to prevent those accidents. We do take some measures to fence off as interim safety measures on some of the coal mines that need reclamation, but generally speaking, that is not an area in which DOI has authority.

Chairman GLENN. The inspector general at the Department of the Interior made a report to us in March of this year. They made certain recommendations to improve DOI's management of environmental safety and health issues.

There were several things they raised, and I would like to know what actions have been taken or what is going on to resolve the following issues that were raised in that report. Develop action plans to ensure that, (A) hazardous waste sites inventories are completed as expeditiously as possible; (B) all previously identified potential hazardous waste sites are promptly evaluated to determine the risk to human health and natural resources; develop and implement Department-wide inventory guidelines and procedures to ensure that the bureaus conduct comprehensive and high-quality inventories that provide reasonable assurance of detection of all significant hazardous waste sites; develop and implement a Department-wide prioritization system to ensure the Department's most significant problem areas, environmental safety and health protection at mining sites.

At that time, the job was supposed to be half completed. What is being done in this area? The half inventory referred to another thing, but what is being done to ensure the Department's most significant contaminated sites are cleaned up in a priority basis before less significant sites, and they listed a number of other things. I won't go ahead and read all of them here.

What is being done in those areas? That was quite an indictment of DOI that they put out, and it was an IG report. What actions have been taken to follow up on all those issues?

Mr. DEASON. OK, Senator Glenn. As Dr. Heyman has indicated, a fundamental part of this is the comprehensive inventory process that has recently been undertaken by the new Administration.

In addition to that, though, we have an evaluation and prioritization model that has been developed and is presently out for a test period by the using bureaus. We hope to be able to evaluate the results of that test by next summer.

We also have a third phase, which is a cost estimation phase, and the idea here is to improve the accuracy of the costs to clean up these sites. What we have done is work with the Department of the Air Force to utilize their system, which is called the Remedial Cost Estimating and Reporting System, RACER. We have recently completed the development of that particular cost-estimating computer model and that will be implemented in the near future in the Department to improve the accuracy of our cost estimates.

We also have a fourth phase, which is the development of a system to track and to monitor the progress in cleaning up the sites. Here again we utilize our colleagues in the Department of Defense. We developed a model which is called the Pollution Abatement Reporting and Information System, PARIS, which basically is an adaptation of the tracking system used by the Department of the Army. This one has also been completed to a prototype stage and will very soon be undergoing user testing.

These four things, the inventory, the priority system, the cost estimating system, and the tracking and monitoring system, are all brand new and we are hopeful that they will be very effective in addressing those major concerns that the IG found.

Chairman GLENN. The Committee certainly supports the recommendation made by the NAS and by the Department of the Interior IG. I have a couple of questions in this area.

The Department of Energy has had some pretty good experience with tiger teams going out and establishing on a rapid basis, getting a better understanding of conditions in environmental safety and health areas and deficiencies in performance required by other regulatory agencies.

Have you thought of using a tiger team approach to this like DOE did? They had pretty good success with that.

Mr. HEYMAN. Senator Glenn, we have been giving some thought to that. I was once at the other end of a tiger team at the University of California, so I know a little bit about their operation.

What I addressed before you were able to come back was the management system at Interior, and I pointed out that from my perspective, having only recently come, it is a highly decentralized place with hazardous materials responsibilities as well as other responsibilities being in quite independent-minded bureaus. And I said the challenge really was, what are we going to do at the center, at the departmental level, to assure that the bureaus behave right in relationship to their statutory responsibilities, that we coordinate well, and that the Department collectively is doing what it is supposed to do.

I pointed out that there has been energized an operation that existed previously but now is meeting regularly, a group of deputy assistant secretaries representing each of the assistant secretaries. I am chairing that. The first management technique that I would like to try to use with regard to accomplishing the kinds of things tiger teams would is to see whether or not, and I have some optimism that this will work, to see whether or not through this group we can enlist both data gathering and behavior changes in the bureau that are necessary, orchestrating them through a central management group that I am chairing.

And I would like to do that before going to what might be viewed as the more radical step of the tiger team model, but I have that well in mind.

Chairman GLENN. Tiger team is one approach. How about assistance from OSHA? Have you asked them to review or assess the adequacy of the Department's worker safety and health programs? We have a wealth of experience. It just seems to me we need to tap the sources and get it applied to your particular situation. Have you talked to OSHA?

Mr. HEYMAN. Senator Glenn, I am assured by the folks who are in charge of that at the departmental level that, (A) they are in touch with OSHA, and (B) they are seeking OSHA's help in exactly that regard.

Chairman GLENN. OK. Let me just summarize here, because we are going to have to end. I appreciate you all being here today and being willing to testify and the length of the hearing this morning.

I am sorry I could not make it back earlier, but it was beyond my control.

I think what we are pointing out here is not necessarily that we are trying to rake one particular department over the coals, although it is being used as an example here of what I believe is rather general throughout all Government. In my opening statement today, I addressed that a little bit.

It was in this very hearing room that some years ago we started off the hearings on Fernald back in Ohio, the nuclear plant down by Cincinnati. They wanted us to come out there and look at the plant, and so we went out there and found out that it was as bad as some of the people around the community said it was. So we held some hearings out there and had several hearings here.

Then we thought after we sort of got done with that, well, things couldn't be as bad throughout the rest of the whole nuclear weapons complex as they had been out there. This surely was an anomaly of some kind. So we had GAO do studies of the rest of the nuclear weapons complex, and lo and behold, it was even worse at other places.

We went from that $8 billion a year that I mentioned earlier in my opening remarks as an estimate of how much it would cost to clean all this whole thing up all across the nuclear weapons complex, it grew until now the estimate is somewhere around $200 billion, I guess, and we don't even know how much, and some of the cleanup we don't even know how to do. So we are now doing research, some of it there at Fernald, trying to figure out how to clean up some of the other areas also, as well as that.

Then we get off of that and look into some of the problems and environmental concerns in other departments and we find out now that we may have just as big of a problem in other departments and across all other Government-owned land and facilities as we have in the nuclear complex.

This thing has just grown. Every time we have looked at it, it has become more difficult to get a handle on and to manage and to get an assessment, but it is not going to get cheaper to clean up, and we know that most of these things are going to have to be cleaned up. We need to prioritize them.

As Ms. Goodman knows, we went through, and she was involved with it over here on the Armed Services Committee staff at that time, we have gone through a lengthy thing since 1985, literally, of trying to get these sites assessed as to what the problems are, trying to prioritize which sites are worst so we can put our money and our efforts into cleaning up the worst sites, the ones that are the biggest danger to the communities they are in or around.

We are going to have to do the same kind of thing here, and I hate to even contemplate how much it will cost. You get into talking about whether it is 5,000 sites or 10,000 sites and we haven't even assessed yet what the problems are. This is going to be an enormous effort for this country.

I think if this hearing does nothing else today, at least it will alert people to the fact that we are into another great big cleanup.

I want to give credit to Bob Alvarez, who is behind me here, who did almost all of the work on this study that we are using as a basis for addressing some of these things today. We are going to continue working in this area.

I hate it that we have to get into this. I wish the departments were taking the initiative instead of us having to point these things out. Sometimes in the past when we have pointed some of these things out we keep thinking we get pretty much ignored by whatever Administration happens to be down the street. I just hope that this Administration can really take the initiative in the different departments and not force us to just have hearing after hearing after hearing to address this. It is obviously a Government-wide problem.

With DOD, we are having base closure. We go through big battles over on the floor. Are we going to let base closure go through or not? We had a vote yesterday afternoon, yes, base closure is going through. The facts of the matter are many of these bases can't be turned over to anybody because they are so polluted or have parts of the base that are. We could turn over certain acreage and fence off other areas and say, well, OK, sometime we may get around to cleaning this up, or if you give somebody the whole base to use for a community or a State or some other Government entity, the Government, because it has not cleaned up, is going to have to retain liability if we turn the land over to somebody else.

So the base closure thing has gotten such a big amount of attention, and I fully support what they have done, but we can't do some of the things that have to be done under base closure because of the contamination and wastes and toxic wastes on some of these places that have yet to be cleaned up. We do not have a good guideline that we can put to a road map that says, here is the problem on every one of these bases. We are still having to define that on the bases that the Government has owned all these years also.

I hope we are not into another quagmire like we got into on the nuclear weapons complex, but I am very much afraid that we are.

I am going to go through the questions and the answers here and then we undoubtedly will have some more information that we may need for our record here. We would appreciate your early response to it.

We appreciate you being here this morning, and thank you very much.

The hearings stand in recess, subject to the call of the chair.

[Whereupon, at 12:25 p.m., the hearing adjourned, subject to the call of the chair.]

APPENDIX

PREPARED STATEMENT OF ALICE M. RIVLIN

Mr. Chairman, I'm happy to be back before this Committee and to have the opportunity to testify on waste management and cleanup of contaminated sites and facilities of the Federal Government. I would like to commend the Committee for directing national attention to the importance of protecting the health and safety of current and future Americans and our environment from the hazards created, in the pursuit of public purposes, by our own Government. The Clinton Administration shares the Committee's view of the seriousness and urgency of the cleanup problem and looks forward to working with you and other committees of Congress in devising a solution.

Hazardous and radioactive waste has been produced at Federal facilities for many years, but the Government has only recently begun to address the problem, or even to assess its magnitude. Cleanup of contaminated sites, already an expensive budget item, could easily require hundreds of billions of dollars and several decades to accomplish. Progress today varies considerably by agency, but, in general, results have been disappointing in relation to the amounts spent. At present, there is no Government-wide strategy for dealing with contaminated sites and no consistent way of assessing risks or measuring progress.

The Clinton Administration is committed to developing a strategy for cleanup of hazardous and radioactive waste at Federal facilities. We believe such a strategy must be based on collaboration with stakeholders in identifying the future uses of contaminated sites, assessment of risks to users and cleanup workers, and estimation of the costs and benefits of cleanup to varying standards. In the light of this information, priorities must be set so that resources can be used most effectively and the most serious risks reduced first.

In cleaning up its own sites and facilities, the Federal Government also has an opportunity to develop new approaches and technologies that can help solve similar problems in the private sector and in other countries. It can serve as a laboratory for assessing the effectiveness of equipment, processes and techniques for both preventing and disposing of a wide variety of contamination. We can share this knowledge with others.

THE MAGNITUDE OF THE PROBLEM

The waste management and cleanup problem facing the Federal Government has accumulated over many years. Many Federal activities generated, treated and disposed of radioactive and other hazardous waste. Thousands of currently and formerly owned Federal sites may be contaminated with such waste. Until recently, the serious environmental consequences of Federal operations were largely unrecognized. The Federal Government placed greater emphasis on other program priorities. Only recently have we focused on the scientific basis for evaluating environmental risks. Only recently have sophisticated environmental cleanup and compliance laws been passed and national attention directed to the problem.

DEPARTMENT OF ENERGY

The sites and facilities of the Department of Energy's (DOE) nuclear weapons complex present the most serious and costly contamination problems facing the Federal Government and pose the greatest waste management and cleanup challenge. Compliance challenges are presented by the hazards of radioactive and hazardous waste resulting from nearly fifty years of atomic weapons production activities and by the significant expansion of environmental, health and safety laws and requirements.

The environmental task facing DOE is enormous and continues to expand. DOE has over 9,000 contaminated sites and facilities requiring cleanup in over thirty States and territories, covering tens of thousands of acres. These areas are replete with hazardous and radioactive wastes in soil and structures, which were caused by research, development, production and testing of nuclear weapons.

To deal with these challenges, DOE has completed 93 compliance and cleanup agreements with the Environmental Protection Agency and State regulators since 1979, most of them since the late 1980s, and an additional thirteen new agreements are currently under negotiation. In addition, in the last few years, DOE's leaders have attempted to change the Department's culture to one of environmental responsibility, increased knowledge and involvement in environmental management, a new openness to public input, and overall accountability to the public for its actions.

Nonetheless, DOE continues to face major technical, planning and institutional challenges in meeting its expanding environmental responsibilities effectively and efficiently. These challenges include developing technically sound, cost-effective technologies to apply to cleanup and waste management problems, establishing a risk management strategy acceptable to regulators and the public, developing consensus on the future use of DOE sites and facilities, developing an equitable strategy for the siting of waste treatment and disposal facilities, meeting worker health and safety needs, and managing the transfer of surplus weapons complex facilities to a cleanup mode.

DEPARTMENT OF DEFENSE

The Department of Defense has more facilities that generate and dispose of hazardous waste than any other Federal agency. Past disposal practices, which were not as stringent as current practices, resulted in the contamination of soil and groundwater at many installations. Currently, DOD is engaged in cleanup at about 1,800 military installations in the U.S. and many installations overseas. Ninety-four of the U.S. installations are listed by EPA on the current National Priorities List (NPL). These NPL sites represent DOD's most serious cleanup challenges.

DOD installations contain a wide range of contaminants, including fuels and solvents, toxic and hazardous wastes, unexploded ordnance, and some low level radioactive waste. Many of these installations generate hazardous wastes through industrial operations to repair and maintain military equipment and services provided by medical clinics, paint shops, fire departments and laundries. Manufacturing and testing munitions at Army ammunition plants and proving grounds have caused some of the most serious contamination problems.

DOD has identified about 18,800 potentially contaminated sites. These sites are subject to many overlapping laws and regulations. The average DOD site takes about eight years to cleanup and complex sites can easily take over ten years. DOD's estimate for cleaning up all of these sites is $25 billion, beginning with expenditures in FY 1991. This number may be understated because the extent of the contamination, cleanup methods, and standards are not yet known in most cases. DOD estimates that it will take 10 to 15 years to complete the cleanup effort. DOD has completed cleanup at 416 of these sites to date.

DEPARTMENT OF THE INTERIOR

Federal lands, including national parks, wildlife refuges and lands managed by the Bureau of Land Management (BLM), contain many hazardous waste sites for which the Federal Government may be liable. The Department of the Interior has also acquired approximately fifteen formerly used defense sites (FUDS) that are contaminated with hazardous wastes from prior Department of Defense-related activities.

By law, the Federal Government promotes multiple uses on most public lands, ranging from recreational activities, such as camping and hiking, to various commercial activities. Thus, numerous sites for commercial mining operations and gas and oil exploration are contaminated with residual ores and chemicals used in the extraction processes. As many as eight million mining claims, most of them now abandoned, have been filed with the BLM since record keeping began in the nineteenth century. (BLM is now developing a systematic inventory of abandoned sites and maintains an inventory of all active mining claims.) Even a though only a minority of these sites may ultimately require remediation, the cost of doing so may prove considerable. BLM also has over 20,000 producing oil and gas leases and over 100,000 non-producing leases on public lands that may contain hazardous wastes.

Numerous municipal landfills on public lands may contain hazardous wastes. BLM has over 300 active municipal solid waste landfills, between 1,000 and 3,000 closed landfills, and an undetermined number of facilities for hazardous waste treatment, storage and disposal.

In addition, handling, spraying and storage of insecticides, herbicides and fertilizers for agricultural activities provide occasions for spills, dumping and misuse, as do geothermal exploration, development and production, logging, and construction of power and pipeline rights-of-way. Illegal dumping of hazardous wastes, illegal wire burning and illegal drug manufacturing operations on isolated public lands also contribute to the environmental problems of agencies like Interior that manage the Nation's public lands.

OTHER AGENCIES

Other sources of potential Federal environmental liability include Federal research laboratories owned by the Environmental Protection Agency (EPA), the U.S. Department of Agriculture (USDA), the Department of Health and Human Services (HHS), the National Aeronautics and Space Administration (NASA) and the Federal Aviation Administration (FAA); abandoned mines and sanitary landfills in National Forests, leaking underground storage tanks at research facilities, cleanup of foreclosed property, and leaching from chemically treated grain in storage for the USDA; several U.S. Coast Guard facilities; General Services Administration (GSA) office buildings, some of which contain substances like asbestos, polychlorinated biphenyls (PCBs) and lead; and metalworking, print making and woodworking activities by inmates at Federal penitentiaries operated by the Department of Justice (DOJ).

In sum, the Federal Government is faced with an enormous number of contaminated facilities and sites that require cleanup and great technical and institutional challenges that must be overcome if we are to meet existing regulatory requirements.

LIMITED RESULTS TO DATE

There are a number of reasons why more has not been accomplished:

- Federal agencies confronted with complex cleanup tasks had little experience or expertise in planning and managing the cleanup program.
- Substantial resources were needed to contain and stabilize the huge amount of waste and contamination at Federal facilities before cleanup could begin.
- Federal and State laws and regulations regarding cleanup standards often overlap and conflict; and the resulting labor- and paper-intensive compliance process moves extremely slowly.
- Cost-effective, efficient management systems and contracting methods were not available and are still under development.
- Effective cleanup technologies were not available for certain types of waste—particularly mixed waste that has both hazardous and radioactive constituents.

IMPLICATIONS

The total cost of cleaning up these sites and facilities is not known. At some sites, complete cleanup is not technically achievable or financially affordable with current technology. Based on what we do know about the scope of the contamination, however, Government-wide cleanup costs probably will be in the hundreds of billions of dollars and require decades to complete.

From FY 1989 through FY 1993 alone, the Federal Government invested over $32 billion in waste management and cleanup activities, including $18 billion at DOE and nearly $14 billion at DOD. The President's proposed FY 1994 budget for these activities is approximately $12 billion, a significant increase over FY 1993. Yet, as a general proposition, significant remediation has barely begun.

The Clinton Administration is determined to address the cleanup problem seriously and to avoid adding to similar problems in the future. Given the many other compelling claims on the Nation's resources, however, it would not be responsible—or perhaps even feasible—to try to restore all these contaminated sites to a state suitable for unrestricted use. Priorities must be set. We must work together with States and local communities and other affected parties to develop and implement a strategy for waste management and cleanup, including the siting of treatment and disposal facilities. This strategy must place priority on reducing health and safety risks to exposed populations, taking into account risks to cleanup workers, the benefits of restoring contaminated ecosystems, equity, and past adverse health effects. Moreover, the Federal waste management and cleanup programs must be better managed to achieve these goals in an efficient, effective manner.

ELEMENTS OF A STRATEGY

It will take time and effort to make major improvements in waste management and cleanup at Federal facilities and sites. The approaches to doing so will vary by agency because of significant differences among them in the scope and nature of the contamination problems to be addressed. Nonetheless, we believe that there is a clear need to develop and implement a comprehensive Government-wide approach to achieve faster, more effective and efficient decisions and results.

The Administration will concentrate on assessing opportunities for reform and undertaking initiatives in the following areas, where strategic changes appear likely to be most beneficial:

- Defining future site use. To date, very little work has been done in this area, but it is crucial, prior to starting cleanup and selecting and applying cleanup standards, to assess the health risk reductions and the costs of attaining sitewide or aggregate area land use alternatives. This assessment would result in a decision on the range of future uses of the site that would drive cleanup objectives and measures. This effort would require that all "stakeholders" be involved, including local interests, Federal and State regulators, and other affected agencies.
- Expanding local stakeholder participation in future site-wide land use planning and remediation, building on the efforts to date to create local stakeholder advisory groups and to involve them more fully and creatively, while—explicitly addressing inherent conflicts of interest.

As part of future site use planning, assessing health risk and identifying health risk reduction approaches for cleanup workers and other exposed populations, in relation to remediation cost, while also carefully weighing the ecological benefits of remediation.

- Establishing common definitions and protective standards for health and safety risks to workers, the public and the environment, as well as sound methodologies for assessing and communicating risks, all keyed to specific land uses. This would be done with State involvement, since ordinarily State requirements must be met where more stringent than Federal requirements.
- Developing reliable cost estimates for cleanup. Obtaining sound cost information is critical to working with local, State and agency leadership to make remediation decisions that are cost beneficial, fair to local interests and affordable to the U.S. taxpayer.
- Improving agency contracting practices to increase competition and improve contractor accountability. DOE and other agencies must improve their capability to select and manage contractors and reform the way they structure and manage cleanup contracts. Competition among contractors is essential to get the best value for the taxpayer. Once a contractor is selected, agencies must manage the contractor effectively to assure that well-defined cost and performance targets are achieved.
- Increasing efficiency of assessment and cleanup by systematically introducing productivity improvements and cost reduction methodologies, e.g., standardization, benchmarking and reengineering. This will ensure that lowest cost, best practices are identified and used uniformly within and across agencies.
- Increasing the priority of pollution prevention efforts. Pollution prevention and waste minimization efforts should be the primary means by which Federal facilities achieve and maintain compliance with environmental laws and regulations.
- Assuring that worker safety and health is maintained and working with OSHA and NIOSH and NIEHS to ensure that sound occupational safety and health policies are in place and enforced at all sites.
- Developing cost-effective new technologies. Priority must be given to R&D on critical technologies that address specific cleanup problems. Initiatives like the McClellan AFB Public/Private Partnership for Innovative Technologies offer opportunities for technology research, testing and demonstration at Federal sites and facilities, including new approaches to regulation, and should be encouraged.

In addition to the direct environmental, health and economic benefits of improvements, there should be significant benefits in terms of job creation and skill development at Federal sites and facilities. These benefits can be transferred to private sector and other State and local cleanup efforts in the United States and can create opportunities for marketing U.S. cleanup expertise and technologies overseas.

ADMINISTRATION ACTIONS

The Clinton Administration is committed to implementing a comprehensive strategic approach to the waste management and cleanup problems of the Federal Government. In the coming months, OMB and the White House Office on Environmental Policy will work with the responsible agencies to help develop and carry out a coordinated strategy for Federal facilities waste management and cleanup activities.

To do this, we are creating a policy-level interagency group to help develop and implement a coordinated approach for Federal facilities waste management and cleanup programs, including analysis and resolution of crosscutting issues.

The group will be an ongoing body made up of senior policy officials of the key Executive Branch agencies and White House offices that are responsible for the Government's waste management and cleanup problems and will be led jointly by the White House Office on Environmental Policy and OMB.

The initial priorities under consideration for the group include:

- Development of a strategy for governmentwide oversight and coordination of Federal waste management and cleanup activities, including guidance on preparing agency cost estimates and budgets.
- Treatment of Federal sites and facilities in the reauthorization of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, (CERCLA, also known as Superfund). The group will analyze and consider options for Federal sites and facilities and will provide recommendations to the interagency group working on the overall plan for Superfund reauthorization.
- Development and implementation of an effective approach for expanding local stakeholder involvement in site planning and cleanup.
- Define future site use options and integrating this into program planning and decision-making.
- Development of definitions and standards for risk levels for workers, the public and the environment.
- Identification of needs and opportunities for the development and application of cost-effective new technologies.
- Identification and implementation of reforms to control program costs and substantially improve productivity and efficiency within and across agencies.

CONCLUSION

We face a massive challenge in cleaning up Federal facilities. The resources available to meet it are limited. Nonetheless, we are confident that we can develop and implement an effective and efficient strategy for meeting this challenge successfully. We look forward to working with you and your colleagues in the months and years to come to achieve this goal.

PREPARED STATEMENT OF STEVEN HERMAN

Good morning, Mr. Chairman and members of the Committee. I am Steven Herman, Assistant Administrator for Enforcement at the U.S. Environmental Protection Agency (EPA). With me is Gordon Davidson, Director of the Office of Federal Facilities Enforcement. I am glad to be here today to discuss the challenges the Federal Government faces in mounting a successful environmental cleanup and compliance program.

My comments today will focus on four areas: an overview of the Federal facilities environmental problem; a discussion of the adequacy of current EPA and other Federal agency strategies to clean up the problem, including an analysis of the applicable laws and enforcement agreements; and, proposals for enhancing the Federal cleanup strategies.

I. OVERVIEW

The Federal facilities environmental problem is substantial, but a number of historical and institutional factors serve to impede efforts to solve the problem. The program and budgeting systems for cleanup and compliance in the different agencies have not been adequately coordinated or interconnected. Environmental expenditures at the Departments of Energy and Defense totalling billions of dollars annually have not yielded the immediate environmental benefits such vast sums might be expected to produce.

I can best illustrate the Federal facilities environmental problem by outlining the struggles facing several key Federal agencies. Over 45 years of weapons production activities at DOE facilities, most, of which emphasized national defense missions over health and safety issues, have created a large legacy of environmental contamination. The enormity of the environmental tasks facing DOE encompasses over 4,000 contaminated sites. Moreover, the physical size of DOE's facilities presents tremendous challenges. The combined area of DOE's Hanford and Idaho National Engineering Lab facilities exceed the area of the state of Rhode Island. Tens of thousands of acres at these DOE sites contain hazardous and/or radioactively contaminated wastes, soils, and structures. In addition, DOE is responsible for thousands of facilities undergoing or awaiting decontamination, decommissioning and dismantlement. One critical aspect of the environmental challenge faced by the Department of Defense (DOD) and EPA is Base Closure and Realignment. There are currently 120 BRAC I and BRAC II military installations, including stand alone housing sites, which are scheduled to be closed. Of these, fifteen are on the National Priorities List (NPL). The President has said that expeditious transfer of land and facilities to non-Federal interests for economic development is one of his highest priorities. In addition, Congress has mandated that site-wide investigations of all 1988 and 1991 closing bases on the NPL be completed by December 5, 1993 and December 5, 1994, respectively. The expeditious transfer of these properties in an environmentally suitable condition will require more than money. It will require new efficiencies in cleanup.

The Department of the Interior (DOI) has not conducted a systematic, agency-wide survey of all lands under its jurisdiction for potential hazardous-materials problems. It has not prepared and released for public review an inventory of sites either suspected or known to be contaminated with hazardous waste/materials and has only recently developed a tracking system of the hazardous materials used by DOI facilities or hazardous waste generated from facility activities.

DOI's situation typifies that of most Federal agencies excluding DOD and DOE. These agencies do not yet have a system in place to estimate the magnitude of the hazardous waste cleanup problems they are facing and are thus unable to determine the resource implications of these problems.

II. ADEQUACY OF CURRENT STRATEGY

EPA must oversee the Federal government's efforts to safely manage and clean up the radioactive, hazardous, and mixed wastes generated from its weapons research and production activities, operation of its military bases, and a myriad of activities in non-defense areas. As an element of these programs, the Federal facilities enforcement program has negotiated Interagency Agreements (IAG) for the cleanup of Federal sites and assists other Federal agencies by reviewing draft scopes of work for Remedial Investigations/Feasibility Studies (RI/FSs) under Superfund. The program now has a larger number of National Priorities List (NPL) sites that have moved through the study phase and into cleanup. EPA is also providing training and technical assistance to other Federal agencies. This encourages the other Federal agencies to become more environmentally self sufficient.

In order to accomplish its Federal facilities mission, EPA has allocated a combined headquarters/Regional total of $32 million and 272 FTE devoted to its Federal facilities program. This includes $29.6 million and 238 FTE in the Superfund area and $2.1 million and 33 FTE in the non-Superfund area.

CURRENT STATUTORY FRAMEWORK

The statutory and Executive Order framework for implementing this commitment to Federal facilities cleanup is provided by:

- the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendment and Reauthorization Act (SARA), (Superfund), and as further amended by the Community Environmental Response Facilitation Act (CERFA);
- the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (RCRA) ,and as further amended by the Federal Facilities Compliance Act;
- the Clean Air Act (CAA);
- the Clean Water Act (CWA);
- the Safe Drinking Water Act (SDWA);
- the Toxic Substances Control Act (TSCA);
- Executive Order 12088;
- Executive Order 12580; and
- Executive Order 12856.

Under these statutes and Executive Orders, EPA conducts Federal facility oversight, multi-media enforcement, promotes pollution prevention, technology transfer and development, training and technical assistance.

EPA's cleanup authority involves our oversight of remedial actions and cleanups at Federal facilities under such statutes as CERCLA. Section 120 (c) of CERCLA requires EPA to establish a Federal Agency Hazardous Waste Compliance Docket. The Docket, containing over 1,900 facilities at last count, provides a snapshot of the cleanup pipeline for Federal facilities. For each Federal facility that is included on the Docket, the responsible Federal agency must complete a preliminary assessment (PA) and, if warranted, a site inspection, (SI), within 18 months of publication of this notice. Such remedial site evaluation activities help determine whether the facility should be included on the NPL.

Although CERCLA does not require an Inter-Agency Agreement (IAG) for Federal facilities until after selection of the remedy at an NPL site, EPA and other Federal agencies often agree to enter into an IAG during the initial study phase (remedial investigation/feasibility study) upon which remedy studies will be based. Thus, typically, EPA negotiates IAGs following the proposal of a site for inclusion on the NPL. Further, as a matter of policy, EPA and other Federal agencies have sought formal state participation as signatories to these cleanup agreements. Prior to finalization of these agreements, the signatories put these agreements out for notice and comment to ensure the public has a voice in how these agreements are to be crafted and implemented. In certain circumstances, EPA has order authority under RCRA and CERCLA to respond to imminent and substantial endangerment situations.

EPA has signed 108 IAGs for cleanup at Federal facilities. Because an IAG may cover activities at more than one site, the Federal facilities for which IAGs have been signed include 115 NPL sites and two non-NPL sites. EPA has the authority under Section 120 to enforce the cleanup milestones contained in the IAGs through assessment by the EPA Regional Office of stipulated penalties, as established by the Agreement, against the Federal agency in question. EPA has assessed stipulated penalties for violations of cleanup milestones or other requirements of IAGs, based on criteria including gravity of the violation and its resulting degree of environmental harm. In addition, several cases have been disputed to the level of the EPA Administrator pursuant to the dispute resolution procedures within the IAGs. Disputes are raised to the Administrator, after being heard by the Regional Administrator, upon a request by any party to the IAG, which includes the state in some cases. In these disputes, the Administrator has the final decision making authority.

EPA also recognizes that a key challenge in the cleanup of sites contaminated with radionuclides is the lack of regulations in this area. In response to this, the Agency is moving ahead expeditiously to develop radiation site cleanup standards and waste management standards. A target date of early Summer 1994 has been set for issuance of draft cleanup standards. The feasibility of developing recycle/reuse standards will also be considered. The cleanup standards will address the procedures and cleanup levels for the remediation of sites contaminated with radionuclides. The waste management standards will address wastes generated from cleanup activities. This activity is being coordinated with other Federal agencies, including the NRC, DOE and DOD.

Cleanup and compliance rates at Federal facilities are tracked by databases established under the various environmental programs that EPA administers, including the major regulatory statutes and CERCLA. Under the Superfund program, progress in cleanup and remediation at private and Federal facilities is tracked by the CERCLA Information System, or CERCLIS. Through CERCLIS, EPA monitors the different stages of cleanup, such as the completion of the Remedial Investigation, Record of Decision, and No Further Action documents, at facilities listed on the NPL.

Other measurements of cleanup progress are not currently available under the Superfund/CERCLIS program. For example, Federal facility cleanup milestones for primary and secondary document submission, which are established in IAGs between EPA and the responsible Federal Agency under Section 120 of CERCLA, are tracked only at the Regional level.

Compliance at Federal facilities is monitored by EPA through both facility inspections and the analysis of self-monitoring reports which are often required by statute or regulation and submitted by Federal agencies. Upon the discovery of a statutory or permit violation at a Federal facility, the appropriate EPA Region, initiates an enforcement action pursuant to the enforcement authorities granted to the Agency in the environmental law which has been violated. The procedure for initiating these enforcement actions depends on the program under which the action is being taken. Typically, the facility is notified in writing of the violation and given an opportunity to respond to the notice within a specified period of time. EPA and the

Federal agency then negotiate an agreement/order regarding compliance matters at the violating facility. Generally, these agreements/orders are enforceable in Federal district court by states and citizens.

In October 1992, Congress passed the Federal Facility Compliance Act as an amendment to RCRA. The Compliance Act waived sovereign immunity for civil and administrative penalties for violations of Federal, interstate, and local hazardous and solid waste requirements, and allows enforcement actions against Federal agencies for injunctive and other relief and for penalties for violations of RCRA. Under the Compliance Act, EPA has authority to issue compliance orders against Federal facilities for RCRA violations, to enforce those orders administratively, and to assess penalties for violations of RCRA.

In addition to RCRA authorities, many Departments and Agencies currently use a multi-media approach in their environmental auditing activities. EPA is promoting and facilitating this type compliance monitoring, which involves a more holistic view of compliance deficiencies and increased environmental awareness by Federal employees. By emphasizing the use of creative solutions to these deficiencies, such as pollution prevention, the Agency promotes both increased compliance and decreased cost.

CURRENT STRATEGY

EPA's strategic plan for the Federal government's environmental management program consists of traditional and innovative strategies for preventing pollution, achieving and monitoring compliance, and expeditiously cleaning up Federal hazardous and radioactive waste sites. This ten-point plan includes the following:

- ENFORCING THE LAW: EPA is continuing to push toward the appropriate use of the full range of enforcement authorities available under environmental laws, including the assessment of penalties and other sanctions and the incorporation of pollution prevention, technology development, and citizen participation requirements into enforcement agreements and orders.
- INVOLVING CITIZENS: The public will be involved in the Federal government's environmental decision making process every step of the way. This means that EPA and other Federal agencies must give up some of their prerogatives and share them with citizens and communities, asking the citizens to help make decisions with us. Public access will begin with the formation of Site Specific Advisory Boards, a structure that offers the best chance for making sound, equitable, and publicly acceptable environmental decisions at federal facilities.
- ENSURING ENVIRONMENTAL EQUITY: The process of involving citizens directly in Federal government's environmental decision making process through the establishment of Site Specific Advisory Boards offers EPA an immediate, effective means to address practices that result in disproportionate adverse environmental impact on communities comprised primarily of the poor and/or people of color. EPA is undertaking a comprehensive study of environmental equity issues as they relate to pollution generated and emitted at Federal facilities.
- PREVENTING POLLUTION: The greatest long term environmental gains are to be found in preventing pollution. EPA has negotiated a voluntary agreement with DOE and is working with other Federal agencies to factor pollution prevention into their life cycle planning.
- STREAMLINING CLEANUP: By using existing statutory authorities to expedite cleanup and employing techniques to streamline the decision making process, EPA will be able to make decisions earlier, incorporate land use scenarios, and focus resources on priority risks at Federal facilities.
- ACCELERATING REUSE OF CLOSING BASES: EPA has been working closely with DOD in establishing a process for streamlining the cleanup at closing facilities and making them available for reuse as quickly as possible.
- DEVELOPING INNOVATIVE TECHNOLOGY: EPA has a number of initiatives underway at Federal facilities in cooperation with the private sector for developing new and innovative technology. EPA's goal is not only to reduce the cost and increase the effectiveness of environmental technologies but to provide an impetus for the U.S. to become the leader in environmental technology.
- ADDRESSING THE NUCLEAR WEAPONS COMPLEX: EPA and the states have negotiated enforcement agreements at every major nuclear weapons facility, including Hanford, Rocky Flats, Savannah River, and Fernald. The program's goal is to ensure compliance with these agreements and establish citizen advisory boards at each of the nuclear weapons sites in order to provide direct public input on the DOE cleanup and compliance plans.
- DEVELOPING MULTI-MEDIA ENFORCEMENT: EPA is addressing multimedia risk and compliance issues through comprehensive, risk-based evaluations at high

priority Federal facilities. OE has established a two-year multimedia initiative at Federal facilities to pilot this new concept.

- BUILDING THE FEDERAL ENVIRONMENTAL PARTNERSHIP: EPA must help build the capacity of Federal agencies to implement their growing environmental cleanup and compliance programs effectively and efficiently through training and other means. Federal agencies look to EPA for leadership in this area.

EPA is also working with its sister agencies, the States, and local communities to protect human health and the environment by coordinating and supporting the development and implementation of a vigorous, forceful Federal facilities enforcement program. EPA's Federal facilities enforcement program has an existing plan for accomplishing its mission within this framework. EPA is enforcing the law in an even-handed and equitable fashion; overseeing and supporting the expeditious clean-up of Federal hazardous and radioactive waste sites; and assisting other agencies in achieving and monitoring compliance with all environmental laws and regulations.

OFFE conducts interagency liaison and/or coordination work which varies considerably in the level of effort involved, the frequency of occurrence, and the form which these activities take. Some of it occurs on a regularly scheduled basis (*e.g.,* monthly Roundtable meetings) while other work can be random, but intensive efforts (*e.g.,* DOE budget review). These activities include outreach, training, policy and guidance development, and participation in interagency workgroups. Attachment A is a list of the major liaison and coordination activities currently being undertaken by OFFE including those projects which involve working jointly with the EPA Office of Federal Activities (OFA).

Cleanup is one area where EPA is demonstrating these objectives every day. EPA is working to streamline cleanup procedures with other Federal agencies in order to more expeditiously address contamination at Federal sites.

The cleanup strategy focuses on improving site assessment in the early phases to avoid duplicative studies, the use of presumptive remedies for similar problems, the use of contingency RODs to allow for risk taking and the use of innovative technologies and the inclusion of community participants in the decision making at Superfund sites. EPA's Region III office has proposed two sites as pilots for streamlined cleanup: Beltsville Agricultural Research Center (BARC), Prince Georges County, Maryland and Langley Research Center (LARC) and Langley Airforce Base (LAFB), Hampton, Virginia.

At both BARC and Langley, Region III proposes to negotiate the terms of a three-party Interagency Agreement that includes the state prior to NPL proposal. Early negotiations would promote the performance of RI/FS and removal work consistent with CERCLA, the National Contingency Plan (NCP) and state law as well as allowing the parties to reach agreement on future investigations and actions. It is anticipated that post-listing elements in the IAG would include: a method for prioritizing work among operable units to assure that work addresses highest-risk areas first; a method for determining whether a non-time-critical removal or a remedial action should be taken at an operable unit on the facility; a mechanism for EPA review or approval of non-time critical removal actions to ensure that such removals are consistent with the final remedy.

The need for streamlining cleanups while still protecting public health and the environment is especially pressing where military bases are being closed. We are cooperating with Congress and DOD to expedite economic development and reuse consistent with environmental protection responsibilities and the Community Environmental Response Facilitation Act (CERFA).

EPA, in partnership with DOD, is streamlining the cleanup at closing military facilities and making clean property at DOD installations readily available for reuse. This new responsibility was established under CERFA. CERFA requires that DOD determine whether parcels of property at bases being closed are uncontaminated. At NPL sites, CERFA also requires EPA to evaluate and concur or non-concur in DOD's determination. The goal is to expeditiously identify property that can be safely made immediately available for economic reuse. CERFA also requires that Federal agencies demonstrate the proper and successful operation of a remedy at NPL sites to EPA, prior to transfer by deed of the property.

Prior to the enactment of CERFA, EPA worked with DOD to accelerate the identification and transfer of real property at installations identified under the Base Closure and Realignment Acts (BRAC) I, II and III.

Support for DOD Base closure and realignment property transfer efforts is one of the top priorities for Administrator Browner and the Administration. On July 2, President Clinton announced his five-part program for economic development at closing military bases. Regional and HQ EPA staff work with the military (both at the installation and command level), state regulators, local government officials, local development or redevelopment agencies, military property transfer offices, and environmental groups to address the myriad environmental and related property transfer issues arising under base closure.

EPA and DOD co-sponsored a series of conferences in three EPA Regions which served as fora for improving communication between DOD, EPA, States, and other interested parties to facilitate cleanup and redevelopment of closing bases and help resolve issues affecting the base closure process. The importance of the team, *i.e.*, the importance of the professional working relationship with the regulators and the installation project manager, was stressed throughout the conferences. An additional benefit of the conferences is that most of the acceleration strategies developed at the conferences will have direct and immediate application to cleanups in general.

Another area of strong importance to improving our cleanup results is developing innovative environmental technologies. EPA is working closely with other Federal agencies to implement improved scoping and expedited cleanup strategies, and to bring innovative technologies on-line. EPA's goal is to accelerate cleanups while ensuring that cleanups continue to be protective.

Other Federal agencies and Departments face challenges similar to DOD and DOE which hamper their ability to accurately assess and address environmental compliance problems and cleanup liability. Problems consistently cited by non-DOD/DOE (Civilian) Federal agencies include lack of training, deficiencies in information resources and compliance tracking, lack of knowledge and expertise regarding specific compliance issues, contractor oversight and issues relating to communication and coordination between EPA, and other Federal agencies. To respond to these problems, EPA has developed the Civilian Federal Agency (CFA) Task Force, made up of approximately 25 members representing 14 Departments and other Federal entities, to address the unique issues and needs that these agencies face with regard to environmental compliance and cleanup. Through periodic meetings of the CFA Task Force, EPA fosters the exchange of information, technical transfer and interagency communication and coordination.

III. Enhancing the Current Strategy

This Administration is committed to cleaning up Federal facilities in an efficient effective manner. This will be accomplished through improved planning and management of cleanup programs. We will assert the leadership expected of us. As one of the early tangible results of this commitment, the President has announced a new Executive order on Pollution Prevention and Community Right-to-Know (E.O. 12856, August 3, 1993). The signing of this order follows through on President Clinton's Earth Day statement that, ". . . it is time that the United States government begins to live under the laws it makes for other people." This Executive Order takes us another important step forward in our goal of establishing a "level playing field" for Federal facilities' compliance with all environmental laws. Federal facilities will now be required to comply with all provisions of the Emergency Planning and Community Right-to-Know Act (EPCRA), including public reporting under Section 313, the Toxics Release Inventory (TRI). With up to an estimated 2,000 Federal facilities having to comply with at least some reporting and notification requirements of EPCRA, this data should help provide the basis for pollution prevention activities also required under this order.

Also under the Executive Order, all Federal agencies are required to submit plans outlining their respective contributions to the President's goal of "reducing their releases of toxic pollutants by 50% by 1999," which he also announced on Earth Day. Implementation of the President's 50% reduction goal should result in a significant long-term fundamental change in how the Federal government approaches its environmental management responsibilities. To reiterate what the President said on Earth Day once more, this shift to pollution prevention that the Executive Order establishes ". . . will reduce toxic releases, control costs associated with cleanups and promote clean technologies. And it will help make our government what it should be—a positive example for the rest of the country."

There are a number of other areas where substantial opportunities exist to improve the efficiency and effectiveness of the overall effort in order to achieve far more cleanup for the resources consumed. As the regulatory agency, we are committed to this strategy, while assuring that public health and the environment are protected.

Potential areas of opportunity that we will pursue include:

- development of innovative technologies;
- increasing meaningful local stakeholder involvement at all phases of the cleanup process;

- consideration of site-wide future land use planning;
- the development of standards in certain areas where they do not exist or are vague or inconsistent;
- streamlining the RI/FS process; and
- reauthorization of Superfund legislation as it impacts Federal facilities.

Let me elaborate further on one of these to give the Members an example of what we have in mind. The magnitude of the Federal facilities cleanup and compliance challenge and the Administration's commitment to encourage new technological solutions for environmental problems gives rise to the Federal government's responsibility to become a leader in promoting and developing new environmental technologies. Because they can more easily and safely serve as laboratories for assessing the effectiveness of environmental equipment, processes, and techniques, Federal facilities offer unique opportunities for both the development and application of innovative technologies and approaches to investigation, remediation, source control, and pollution prevention.

The development and use of new technologies at Federal facilities will foster better, faster, safer and more cost effective environmental protection at both Federal and non-Federal sites. EPA's Federal facilities enforcement and technology research, development and policy programs in cooperation with other Federal agencies and the States have a number of initiatives underway to begin to address the environmental technology needs of both the public and private sectors, and to provide an impetus for the country to become the leader in environmental technologies.

For example, EPA is working to establish Federal facilities as test centers for innovative technologies for site investigation, remediation and pollution prevention. At McClellan Air Force Base, EPA, the State of California and a number of Fortune 500 companies have been collaborating to measure the performance of a number of innovative technologies for remediation. We are also proposing the establishment of public-private partnership projects at a number of other Federal sites.

The Federal strategy and interagency coordinating process set forth in Deputy Director Rivlin's statement provides an Administration framework to overcome the previous shortcomings in goal setting, planning, coordination, and environmental leadership by the Federal government. EPA looks forward to providing active support to OMB and the Office of Environmental Policy in implementing this strategic approach to the waste management and cleanup problems of the Federal government.

CONCLUSION

EPA would like to help build a Federal facilities environmental program that protects human health and natural resources, helps restore the economic viability of communities, and creates jobs and technological leadership. The success of this venture will be measured by the degree to which key stakeholders, such as the public, States, and the Congress, believe that the Government has diligently, effectively, and efficiently pursued environmental protection. Before EPA and the Federal government are judged to be successful, however, we must develop strategies to meet our environmental objectives and plan, budget, and execute more effectively and efficiently to meet those objectives. I believe we have started that process, but have much more to do, and I believe this Administration is up to the task.

This concludes my prepared statement. I will be happy to answer any questions that you may have at this time.

ATTACHMENT A

OFFE INTERAGENCY LIAISON ACTIVITIES

- General: Within OFFE, all three divisions conduct some type of interagency liaison and/or coordination. This liaison work varies considerably in the level of effort involved, the frequency of occurrence, and the form which these activities take. Some of it occurs on a regularly scheduled basis (e.g., monthly Roundtable meetings) while other work can be random, but intensive efforts (e.g., DOE budget review). These activities include outreach, training, policy and guidance development, and participation in interagency workgroups. Some of the items listed here may be perceived as falling more into our oversight role, but for purposes of this exercise it seems useful to be more inclusive. The following is a list of the major liaison and coordination activities currently being undertaken by OFFE, including those projects which involve working jointly with OFA.
- Outreach Activities:
  —Federal Agency Environmental Roundtable

—PIES/FAME P2 Clearinghouse
—Clue-In Training Bulletin Board (new)
—Annual Regional Fed Fac Conferences (All 10 Regions)
—Speaking Engagements at Federal Agency Environmental Conferences/Workshops/Training Courses
—Reviewing DOD Awards Nominees

- OFFE-lead Interagency Workgroups:
  —Civilian Federal Agency (CFA) Environmental improvement Task Force
  —Keystone Dialogue FACA Committee
  —A–106 Interagency Advisory Committee
  —Federal Sector P2 Strategy Workgroup (OFA Participation)
  —Federal Facilities Leadership Council
  —CERCLA Reauthorization Interagency Workgroup
- OFFE Participation in Interagency Workgroups:
  —DOE Environmental Management Advisory Committee (EMAC) (w/OFA)
  —Federal Agency Remediation Technology Roundtable (OSWER/TIO)
  —Energy and Environmental Policy Committee (OMB lead)
  —Interagency Pollution Prevention Task Force
  —WGA DOIT FACA Committee
  —Interagency Steering Committee on Radiation Standards
  —DOE/EPA Mixed Waste Workgroup
  —DOE WIPP Workgroup
  —CWA Reauthorization Interagency Workgroup
  —FFCA FOTW Workgroup
  —DOD Ordnance Steering Committee
  —FFCA Munitions Workgroup
  —Working Group on PCB's in Navy Ships
- Training:
  —Joint EPA/Air Force P2 Training Courses
  —AFIT/EPA Risk Communications Training Courses
- Joint Policy/Guidance Development
  —Federal Sector P2 Strategy (OFA Participation)
  —P2 Facility Planning Manual (w/AEPI)
  —P2 Life-Cycle Analysis Guide
  —A–106 Guidance and Annual Reviews
  —TRI GOCO Report
  —Update of Environmental Audit Guidelines and Protocols
  —CFA Annotated Environmental Bibliography
  —Env. Compliance Officer's Desk Reference (proposed)
  —"Green Government" Challenge Program (new—in P2 E.O.)
- Compliance/Enforcement Coordination:
  —Haz Waste Docket Coordination
  —Participation in DOD Quarterly Compliance Reviews
  —FFTS and Compliance Data Sharing
  —Joint Policy Development (e.g., accelerated cleanup)
- Joint Demonstration Projects:
  —Tidewater Interagency Pollution Prevention Program (TIPPP)
  —McClellan AFB Innovative Technology Demonstration Project
  —WGA Federal Facilities Cleanup Technology Demonstration Program
  —DOE Pinellas Technology Demo Project (RCRA)—Proposed
- Joint OFFE/OFA Activities:
  —Base Closure Policies
  —P2 Strategy and Guidance Development
  —DOE EMAC Committee
  —Associate Reviewer on DOE Waste Mgmt. PEIS
  —OFA Water Use Efficiency Study

PREPARED STATEMENT OF THOMAS P. GRUMBLY

Mr. Chairman, I appreciate the opportunity to appear before the Committee on Governmental Affairs to discuss the significant challenges facing the Department of Energy's Environmental Restoration and Waste Management program. I am particularly pleased to appear with my colleagues from other Federal agencies. We are working with these agencies in an interagency group coordinated by the White House Office of Environmental Policy to develop the Administration's position on cleaning up waste sites.

SUMMARY

Today I would like to discuss some of the unprecedented challenges we face and some of our initiatives to grapple with them. The challenges include some very real risks to public health and the environment as well as some extraordinarily complex technical and institutional problems. We are conscious that the Department's Environmental Restoration and Waste Management program has far-reaching technical and market power. We are also conscious of the troubled legacy that we inherit—in the soil, in the water, in the air, and, all too often, in people's hearts. We are committed to responding to these challenges by transforming the Department of Energy into (1) a highly effective and efficient protector of public health and the environment, (2) an agency with productive relationships with its stakeholders and contractors, and (3) an agent of change for developing new environmental technologies for the twenty-first century. We look forward to working with the Committee and coordinating with other Federal agencies, States, tribal governments and local stakeholders, as we put our commitment into action.

I. UNPRECEDENTED CHALLENGES AND INITIATIVES TO MANAGE UNKNOWN COSTS AND RISKS

The challenge of our office in the Department of Energy is an extremely difficult task—no less significant than closing the circle begun by the men and women of the Manhattan Project 50 years ago—perhaps the most profound scientific development in human history. This is an extraordinarily exciting task, as it involves issues that will be among the most complex, controversial and interesting of our lifetimes:

> How do we facilitate the conversion of one of the largest defense industries ever created into competitive civilian operations? How do we do so in a socially responsible way that is sensitive to the people and communities whose lives have become inextricably linked with DOE over time?
>
> How do we safely, quickly and efficiently accomplish the unprecedented clean up of thousands of waste sites and contaminated facilities?
>
> Can humans control the use of land for periods extending longer into the future than we can see clearly into the past?
>
> What is the value of an essentially manmade element: plutonium? Is it an asset or a liability?
>
> How do we reconcile the need to make highly complex, often technical decisions, under intense time pressures, with the fundamental rights of people in a democracy to have a chance to participate in decisions that affect them? This is ultimately the greatest challenge—because this precious idea called democracy must not be sacrificed for the cause of defending it.

The program has made good progress on this enormous undertaking but there are many areas in which we must do much better. We must do a much better job of determining the health and environmental risks at our facilities. In 1991 the Office of Technology Assessment published its landmark study, "Complex Cleanup," regarding the environmental problems in the DOE nuclear weapons complex. One of its major findings was that the Department lacks a sufficient basis for evaluating health and environmental risk. Unfortunately, little progress has been made since that report. We intend to change that.

Recently, I initiated a comprehensive effort to develop better tools, and independent methods for evaluating health risks. The Department is in the process of creating a comprehensive review team that will identify the long-term health and environmental risks at our major sites and facilities. Environmental Restoration and Waste Management will thereby better understand the risks at existing facilities and also reach out to the academic and public health communities, States, regulators, citizens, and other stakeholders for input that will greatly improve our decision making. Decisions can then be based on a broad understanding of risks along with other considerations such as statutory mandates, anticipated land use and associated costs, technical feasibility and cultural values, worker health and safety, and environmental equity.

We intend to complete a comprehensive survey of immediate exposure risks in FY 1994. At the same time, we will be developing appropriate analytical tools for evaluating long-term risk as well as identifying specific data needs. These efforts should be completed in FY 1995.

We do not need to wait for completion of this work, however, to continue reducing risks where they can be clearly identified. First and foremost, DOE believes in protecting public health and ensuring community and environmental safety, with worker health and safety as a top priority.

The Office of Technology Assessment recently published another report, "Hazards Ahead," documenting the shortcomings of the Department's worker health and safety protection efforts. Secretary O'Leary has lauded this effort as an "excellent report that provides a blueprint for how to proceed to correct the problems." I fully support the Secretary's view, and regard worker health and safety as one of my top priorities. We simply must do better.

The structure for much of our work is incorporated into environmental compliance agreements among DOE, the EPA, and the States. These agreements establish timetables for conducting environmental activities. We take seriously the commitment embedded in these agreements, which we entered into in good faith. In some cases, however, we now know that cleanups can be accelerated ahead of schedule by taking interim actions before all planned site investigations are complete. In other cases, investigations have revealed that the problem is larger, more complex, or simply different than we originally expected. Certain problems lack permanent, effective technical solutions, and so may be better handled by stabilizing and investing in research. We have developed existing agreements on the best information available at the time. We can renegotiate them within the terms of the agreements, if good cause can be shown. The Department is dedicated to honoring its obligation to restore the environment and to protect the health and safety of our citizens and workers. Only when we demonstrate our credibility and commitment to cleanup, are the States and EPA likely to be willing participants in such renegotiations. We must do better.

II. THE ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT PROGRAM HAS PRODUCED SIGNIFICANT RESULTS

DOE's Environmental Restoration and Waste Management Program is the largest environmental program in the world at an FY 1994 budget request of approximately $6.5 billion. Through this program, the Department of Energy is responsible for cleaning up tens of thousands of acres of wastes, contaminated soil, groundwater, and structures, at 120 sites in 36 states and territories. The Environmental Restoration and Waste Management program has spent approximately $15 billion since it was established in 1989. What results and progress do we have to show for the expenditure?

I would like to highlight just a few accomplishments here, and include a larger number in Appendix A.

- *Radon Emissions Reduced at Fernald.*—A bentonite clay slurry was applied on top of two silos containing waste. This action reduced radon emissions by approximately 99 percent and greatly reduces the potential hazards associated with possible failure of the silo enclosure.
- *Carbon Tetrachloride Removed at Hanford.*—Removed 9,504 pounds of a potentially carcinogenic compound (carbon tetrachloride) through use of a vapor extraction system, reducing risk to human health and the environment.
- *Cleanup of M-area Site in South Carolina.*—Completed and approved cap over the M-area site. This action eliminated contamination runoff into the adjacent "Carolina" bay and greatly reduced groundwater contamination through infiltration.
- *Treated High Level Liquid Radioactive Waste in Idaho.*—Treated over 600,000 gallons of highly corrosive liquid high-level waste to a more stable, dry, granular solid called calcine at the Idaho National Engineering Laboratory. The calcination process reduces waste volume by approximately 6 to 1.
- *In Situ Steam Stripping Recovers Gasoline from Groundwater at Lawrence Livermore Laboratory.*—Thousands of gallons of gasoline were recovered through in situ steam stripping at Lawrence Livermore Laboratory. This technology saved millions of dollars over conventional technologies, accelerated the cleanup, avoided worker exposures, and helped avoid the spread of contaminated groundwater off site.

III. NEW APPROACHES TO LONG-TERM ENVIRONMENTAL MANAGEMENT

The DOE Environmental Restoration and Waste Management program must learn from the experience of EPA's Superfund and other "cleanup" programs. These lessons include:

1) In many cases no effective long-term technologies exist to "clean up" hazardous and nuclear waste sites;

2) Even if a technology exists we often lack clear "cleanup" standards and so we do not know what goal is acceptable for developing new technologies or applying existing technologies. Hence, we, as a society, have not yet agreed on the meaning of "cleanup" or how to achieve it in many cases; and

3) Even with technologies and standards, with limited resources there are far too many sites requiring attention to take action simultaneously to meet all cleanup demands.

Clearly, the problems are larger and more intractable than most people previously predicted. Nonetheless, real progress is needed; real progress is demanded; and we are committed to making this progress. Too much is at stake, regarding both public health and public funds, to fail in this commitment.

The old paradigm of simply going down a list of waste sites and "cleaning them up" is not technically realistic. We must gain much greater control over the Environmental Restoration and Waste Management program to achieve these results based on reasonable *priorities.* These priorities must reflect a careful assessment of human health exposures and risk, environmental threats, responsible land use planning, socioeconomic considerations and a commitment to regulatory compliance. These priorities must be developed with stakeholders. To do this, a new strategy is required that acknowledges the complexity of investigating and remediating waste sites. Instead of a mechanical cleanup process leading from discovery to investigation to remedial construction, a multi-phase approach could be utilized at many sites.

This new strategy must achieve near term results through the use of rapid "interim remedies," while simultaneously (1) developing more cost-effective long-term remedial technologies, (2) characterizing health adequately, safety and environmental threats, and (3) developing achievable and protective cleanup standards.

More widespread use of interim remedies can help slow or halt the migration of contamination to prevent the size and cost of the problem from growing. Many interim remedies could occur immediately upon some minimal investigation, but *before* final characterization is completed. We must identify those situations where we cannot afford to wait until a perfect remedy is available, and take appropriate action based on preventing exposure risks. At the same time, we must also identify those situations that do not present any near-term exposure risk, and seek to ensure that they remain stable, while developing long-term remedies and *dealing with higher risk priorities.* We must avoid the temptation to throw money at problems that do not present any exposure risk merely to appear to be "doing something." Using interim remedies can also allow time to develop needed technologies. For example, one interim remedy is "counterpumping" (using strategically located wells to slow or halt the spread of contaminated groundwater), and removing highly contaminated soil or sludge ("hot spots") to eliminate sources of contamination. The use of interim remedies has been recommended by the Congressional Office of Technology Assessment and by private contractors with significant experience in the Superfund program. This action-oriented approach is also being increasingly used by EPA and the Defense Department. As you can see, under this approach, identifying and acting on high risk sites first, and developing new technologies, is not a sideline of the program, but rather must be a central focus around which the program is organized.

At each site, this strategy would ensure that an effective long-term remedy is put in place as soon as a feasible technology becomes available. For similar sites, similar remedies could be developed and used to avoid "reinventing the wheel." For unique sites, this could involve the gradual introduction of technologies as elements in an integrated treatment program, through an integrative, or "observational approach," as has been recommended by many experts in the field.

Let me be clear: we are *not* advocating a leisurely approach to cleanup, nor are we suggesting that such a multi-phase strategy be rigidly followed for all sites. For sites where existing technologies are adequate, the multi-phased approach may not be appropriate. We are suggesting, however, that the use of interim remedies followed by an effective long-term remedy as soon as it is available, can help speed cleanup and control costs in the long run by avoiding wasting resources on ineffective remedies that must later be replaced, and will reorient the program to give technology development the focus it deserves.

Let me also emphasize that this approach does not mean unilaterally imposing DOE's views about risk and priorities on other stakeholders. We recognize that a truly successful program will only be possible by working cooperatively with stakeholders on developing priorities and evaluating risks. We also understand that states and citizens have sometimes opposed the use of interim remedies due to concerns that the remedies will be used as a substitute for permanent remedies and that public participation will not be appropriately considered. The use of an interim remedy should not replace or interfere with any planned long-term remedy, and a clear, understandable decision making process should also be used when considering any remedy—short-term or long-term—so citizens will have an open opportunity for input. Public participation is crucial at each decision point in the process: the selection of an interim remedy, delaying a final remedy pending new technology development, and the selection of a long-term remedy. Before embarking on the suggested alternative strategy, we must have in place incentives to ensure that each site is

1) adequately monitored, 2) revisited to determine the availability of an effective long-term remedy, and 3) remediated when technology becomes available.

Implementing this alternative cleanup strategy implies that developing new technologies is more than conducting research—it must be integrated into a broader cleanup program strategy. The environmental management program should be restructured to focus appropriate resources on the critical need for technology development. In addition to this strategic restructuring of the program, both regulatory authorities and regulated Federal agencies must help develop and use effective, long-term remedial technologies. Specifically, three critical tools will be needed to make significant long-term progress:

a. Cleanup Standards;
b. Land-use Planning; and
c. New Technologies.

A. TOOLS NEEDED: CLEANUP STANDARDS

As DOE pursues its massive cleanup task, we find that we lack some of the most basic technical and institutional tools we will need. The first of these I would like to discuss is the lack of cleanup standards. Although the general issue of cleanup standards is one that involves many Federal and State agencies, private companies, and the public, standards for radioactivity are a particular concern for DOE because of the nature of our problems and the defense related institutional context in which we have inherited them.

We are grappling with the development of a variety of standards, such as those for hazardous waste treatment, yet perhaps the biggest uncertainty facing DOE's Environmental Restoration and Waste Management program is what level of residual radioactivity is acceptable. Without standards for residual radioactivity, DOE's cleanup will be tremendously complicated. Effective cleanup planning and cost estimation, remedy design, and technology development are all impossible without clear goals.

Although DOE has established internal standards, it is unlikely that the States, tribes and the public will accept those standards as a basis for cleanup. Moreover, the legacy of a half century of DOE self-regulation in the area may have taught us that this system would simply be bad public policy. The Department believes that externally established and enforced standards would contribute to a more effective and credible cleanup program. The Department's considerable, probably unparalleled, technical expertise should be involved in the standard-setting process along with other stakeholders to ensure that the standards make sense from a technical perspective as they are developed and implemented. We are already working with EPA as they begin establishing enforceable standards for residual radioactivity. These standards would apply to the cleanup of DOE facilities, and could allow for the recycling of contaminated metals for certain uses.

B. TOOLS NEEDED: LAND USE POLICY

A crucial element in making greater progress on cleanup is dealing with the question of future land use. Clearly this issue affects not only Federal agencies, but State, local, and tribal governments and the public at every level. The current state of affairs is not workable. In some cases, no clear decisions have been made on future land use. In other cases, an implicit decision is made to require cleanup to a level necessary to make the land available for immediate unrestricted use. All of these approaches tend to establish cleanup levels that may be technically or economically infeasible in the near term.

As a result, land where some degree of "cleanup" has occurred is determined to be unavailable for *any* use because it is not available for *all* uses. Some remedial actions do not progress beyond the study phase because no technology exists to meet unrestricted use standards.

The time has come to act on the painful lessons of the past ten years and consider a variety of land uses for progressive stages of a remedial action. Obviously, this raises some profound implications regarding our ability to control long-term land use and our obligation to make decisions respecting future generations. As we develop land use policies we must address these implications squarely. In the near term, however, it seems prudent to change our mode of operation to enable us to make progress on cleanups, even if it does not result in pristine sites. But we can assimilate these lessons by preventing new sites from becoming contaminated, and make what progress we can in this generation on cleaning up existing contamination.

We look forward to working with Congress to ensure that we have reasonable standards to guide the cleanup effort.

C. TOOLS NEEDED: NEW TECHNOLOGIES

The third important need is for effective long-term cleanup technologies in many particular situations. For example, no one has ever safely emptied and decontaminated million-gallon tanks of liquid high level radioactive wastes. Also, many existing treatment technologies for organic waste could exacerbate problems with the radioactive component of mixed wastes. This does not mean that the problems are unsolvable. It does mean that we must recognize these gaps in environmental technologies, act vigorously to develop needed technologies, and identify and use available technologies where effective.

We are involved in a number of efforts to develop these new technologies. First, of course, are the variety of efforts at the national laboratories. These facilities have some of the best technical talent and facilities in the world, and are now available for conversion from previous defense missions. Second, we are serving on a Federal Advisory Committee with the Western Governors Associations, the Environmental Protection Agency, the Department of Defense, and the Department of the Interior called the Committee for the Development of On-Site Innovative Technologies. Third, we intend to develop effective incentives to encourage the use of innovative technologies at each site.

IV. IMPROVING BUDGETING, REDUCING COSTS, INCREASING PRODUCTIVITY, AND DEVELOPING LONG-TERM COST ESTIMATES

As the Environmental Restoration and Waste Management program changes rapidly while the Department defines the extent and complexity of contamination at its sites, it faces rapid cost increases. The program's fiscal year 1994 budget request of $6.5 billion is roughly 18 percent greater than the fiscal year 1993 budget appropriation, and more than three times its first fiscal year budget in 1989. Responsibility for this level of resources requires the Department to demonstrate efficiency, productivity, and solid results. In fact as more sites move to the construction phase of cleanup and more facilities are transferred to Environmental Restoration and Waste Management for transition, the Environmental Restoration and Waste Management resource requirements will be significant in the next few years. We must demonstrate that program funds are being used as efficiently as possible in order to have the credibility necessary to receive the needed resources or to renegotiate existing agreements.

In 1991 an Interagency Review Group, consisting of the Environmental Protection Agency, the Departments of Justice, Defense, and Army, and the Office of Management and Budget, completed an intensive management review of the Environmental Restoration and Waste Management budget. The group identified the following areas requiring additional attention: cost control, cost estimating, and allocation of overhead cost. In April 1991, the General Accounting Office issued a report entitled "Nuclear Health and Safety: More Can Be Done To Better Control Environmental Restoration Costs" that advised the Department to complete baselining in the Environmental Restoration Program, develop guidance on a consistent cost estimating process, and establish a lessons-learned management information system to monitor cost growth that is compatible with the Field Offices. Environmental Restoration and Waste Management has begun to respond to these findings, and has identified other ways to carry out its activities in a more cost-efficient manner.

Since 1991 we have developed specific efforts to control the costs of our activities. The Environmental Restoration and Waste Management program has instituted much greater formality and discipline in its cost estimating and independent review process. We have provided formal policy, guidelines and training to both Headquarters and field staff on cost estimating and analysis techniques, systematic review processes, and improved project and cost control systems. An initial process to improve cost management controls is now in place. Review teams conduct annual validation reviews to assess the adequacy of scope definition, schedule, and cost of EM projects and activities. In addition, the Environmental Restoration and Waste Management Cost Quality Management program has conducted independent self-assessments at twelve sites to evaluate performance in cost and schedule estimating, indirect cost practices and related cost control measures. Action plans are being prepared to systematically address required improvements. Additional Cost Quality Management Program reviews will provide a continuous update of the status of improvements in the quality of cost estimates and the management systems designed to control costs.

The recommendations of the General Accounting Office, the Interagency Review Group, and other organizations are a valuable part of the Program's development. The development of the Progress Tracking System was an outgrowth of the 1991 effort to track program performance. This uniform reporting system collects monthly cost, schedule, and technical data from field offices for each activity funded by Environmental Restoration and Waste Management. The field offices report program progress as well as cost and schedule variances and milestone status. Continued improvements are planned to better enable Headquarters Environmental Restoration and Waste Management staff to use the tracking system to review the status of activities, to monitor changes to baselines, to conduct trend analyses, to support management decisions, and to report externally on the progress of the program.

We continue to develop programs that evaluate the success of our cost-control efforts, and set policies that will improve our management and planning effectiveness. For example, the Environmental Restoration and Waste Management Strategic Plan describes our mission and future goals, and the Environmental Restoration and Waste Management Five-Year Plan describes our environmental restoration and waste management activities.

V. Initiatives for Contractor Accountability Begun—More to Come

A. EXISTING ACCOUNTABILITY SYSTEMS

DOE is more highly reliant on contractors than any other agency, and Environmental Restoration and Waste Management is now the largest program in DOE. In May, Secretary O'Leary announced a sweeping set of initiatives to increase DOE contractor accountability.

Although deficiencies still exist in the area of contractor accountability, the Program is making progress in several areas. Environmental Restoration and Waste Management conducts periodic program management reviews and analyses, has established internal program tracking systems, and carries out assessments. Each month, Environmental Restoration and Waste Management's program offices use the Department's "Approved Funding Program" to distribute funds to the field offices, and the Financial Information System to track fiscal performance against the amounts allocated. Headquarters program managers also conduct periodic in-depth reviews of field office activities.

Environmental Restoration and Waste Management continues to evaluate the cost estimating and cost management practices of its contractors. In fact, we recently completed a first round of Cost Quality Management Assessments, which will serve as a benchmark for monitoring progress in achieving specific improvements identified for each site.

At some sites, contractors operate under a new "cost accountability" rule, which imposes financial responsibility for the cost of any verified negligence or willful misconduct, including fines and penalties for environmental violations.

B. ENVIRONMENTAL RESTORATION MANAGEMENT CONTRACTORS

New Environmental Restoration and Waste Management contracts developed under the Environmental Restoration Management Contractor initiative include the contractor-liability provisions of the Department's new accountability rule. The rule was specifically developed to improve the performance of management and operating contractors, particularly in the areas of environment, health, and safety. The rule has restructured the Department's award fee system by requiring the payment of contractor fees to more accurately reflect specific performance. It also requires that management and operations contractors assume the financial risk for certain avoidable costs and expenses. Avoidable costs are determined on a case-by-case basis, and include the following:

- direct costs and expenses resulting from negligence by the contractor or its subcontractor in carrying out work under the contract when the work is clearly within the exclusive control of the contractor and the costs result from the exclusive actions or inactions of the contractor;
- fines and penalties imposed under laws or regulations and resulting from a contractor's negligence or misconduct and where the contractor's conduct did not occur from compliance with formal Departmental guidance and involved an area of responsibility clearly placed on the contractor;
- costs and expenses resulting from damage to government property as a result of contractor or subcontractor negligence; and
- costs related to damage to or losses of government property as a result of theft or embezzlement.

Improved financial accountability provisions are included in the new Environmental Restoration Management Contractors at two of our sites. Management of cleanup activities under these contracts will be improved through a more centralized control of the remediation process and the award fee structure.

The Fernald Environmental Restoration Management Corporation, already in place as the contractor for the Fernald Environmental Restoration and Waste Management Project in Ohio, assumed full responsibility for the Fernald site on December 1, 1992. The Fernald contract shows promise, as the contractor has already identified contracting provisions with the potential to reduce costs.

The Department has selected Bechtel Hanford, Inc. as the Hanford, Washington Environmental Restoration Management Contractor. The transition period for the Hanford contract was initially targeted to begin on March 1, 1993, with Bechtel to assume full responsibility on July 1, 1993. However, this schedule will change as a result of a protest by another contract bidder.

In summary, Environmental Restoration and Waste Management will improve upon previous efforts in contracts management so that the Department is in better control of the overall system. Firm deadlines will be set for the establishment of Environmental Restoration and Waste Management project baselines that define the costs, schedules, and technical details of activities. These baselines will make it easier to measure contractor performance. Quantifiable cost objectives will be established to assure that management and cost controls are used effectively to achieve outcomes that are consistent with expectations. Performance will be measured by the containment of costs within established cost objectives, and managers will be held accountable at all levels for the success of program operations.

C. PLANS FOR BETTER ACCOUNTABILITY

We are planning a number of initiatives to improve contracting procedures. For sites controlled by Environmental Restoration and Waste Management (e.g., Fernald and Hanford) we intend to:

- Shift essential project management responsibilities at each site to DOE personnel.
- Use fixed price competitively solicited contracts defined in performance-based terms for landlord services and all remediation contracting.
- Develop and implement formal, measurable quality assurance and contract administration plans (including specific deliverables, cost targets, schedules, etc.) for all site contractors to enable better assessments of contractor performance.
- Prepare (using DOE staff) internal cost estimates for each Requests for Proposal and use these estimates in evaluating contractor proposals and in negotiating contracts.
- Convert subjective award fee criteria to objective, measurable incentive fee criteria, including both positive and negative incentives, based to the extent practicable on quality assurance and contract administration plans.
- Limit the length of all contracts for services to five years, with few exceptions.
- Develop a DOE staffing plan that spells out the functions, numbers, kinds and cost of staff needed, with a comparison to those currently used by the prime contractor for the tasks that will be replaced by Environmental Restoration and Waste Management.

For sites not controlled by Environmental Restoration and Waste Management (e.g., Savannah River and Pantex) somewhat different contracting reforms will be pursued by our office:

- Separate out all EM environmental restoration (ER) work from the Management and Operations (M&O) contractors to enable DOE staff to perform major project management responsibilities for ER, as in the case of EM-managed sites described above.
- Upgrade and intensify EM's oversight of M&O contractor Waste Management activities by:
  - —Defining the tasks to be completed in performance-based terms (to the extent practical), costs to be incurred (estimated by DOE staff), schedules, and deliverables. Track and objectively assess contractor performance (cost, schedule, deliverables) and fee against these predetermined, measurable performance objectives.
  - —Converting subjective award fee criteria to objective, measurable incentive fee criteria, including both positive and negative incentives, to the extent practicable.
  - —Instituting cost-incurred audits to assist in cost containment by ensuring that costs incurred are reasonable, allowable, and allocable.

We will coordinate our contractor reform activities with the broader efforts occurring throughout the Department.

VI. RETRAINING AND RETOOLING THE DOE COMPLEX

Just as the Department is concerned about preserving the health and safety of the workers performing cleanup activities, it is also concerned about the economic vitality of the communities around its sites and facilities and providing work opportunities in Environmental Restoration and Waste Management. As a result of legislation co-sponsored last year by you, Mr. Chairman, the Department has established a Task Force and guidance directly from the Secretary's office to accomplish this crucial mission of worker and community transition.

As the Environmental Restoration and Waste Management program assumes responsibility for Departmental sites, it also assumes responsibility for the workforce employed at the sites. As the mission of some sites changes from weapons production to environmental cleanup, the skills for that workforce will similarly change. Our activities have become an important driver for environmental skills as well as for environmental technologies. Consequently, retraining workers is essential to the success of our program. The overall goal of worker retraining programs is to reduce the number of involuntarily displaced workers and to mitigate the negative economic impacts on the community.

To address the issue of worker retraining, the Environmental Restoration and Waste Management program is focusing on three areas of training: training for environmental cleanup jobs; training employees for other jobs on the sites; and training workers for jobs in the local communities. In the case of environmental cleanup retraining, the Department is identifying key skills of the present workforce, defining the skill requirements needed to complete the Environmental Restoration and Waste Management mission, and matching present employees with available openings for Environmental Restoration and Waste Management positions.

For environmental cleanup training, Environmental Restoration and Waste Management will also explore educational opportunities through vocational schools and colleges. At the Rocky Flats Plant in Colorado, the Rocky Flats Institute reopened in the fall of 1992, offering undergraduate courses leading to an Associate of Science degree in hazardous materials management and certificates in hazardous materials technology and radiation protection. We are encouraging Rocky Flats Plant workers with appropriate backgrounds to participate in undergraduate and graduate environmental programs at the University of Denver and the Colorado School of Mines. The Department has also developed a program to cover employee tuition payments for this coursework.

For displaced workers, the Department will provide assistance through academic and vocational counseling, individualized training programs, and a range of educational opportunities. An outplacement program established at each affected site will allow employees to select training that is most likely to prepare them for future employment when and sometimes before they are displaced. Displaced workers may receive training funded by the Department of Labor through the Job Training Partnership Act.

The Department has developed a policy that also considers how to implement Section 3161 of the National Defense Authorization Act of 1993, which sets forth objectives to be accomplished for restructuring of the workforce at facilities that are being reconfigured or downsized due to the change in the defense production mission. It is our intent to meet the objectives of the legislation and develop site-specific workforce restructuring plans that address stakeholders concerns and minimize socioeconomic impacts to workers and local communities.

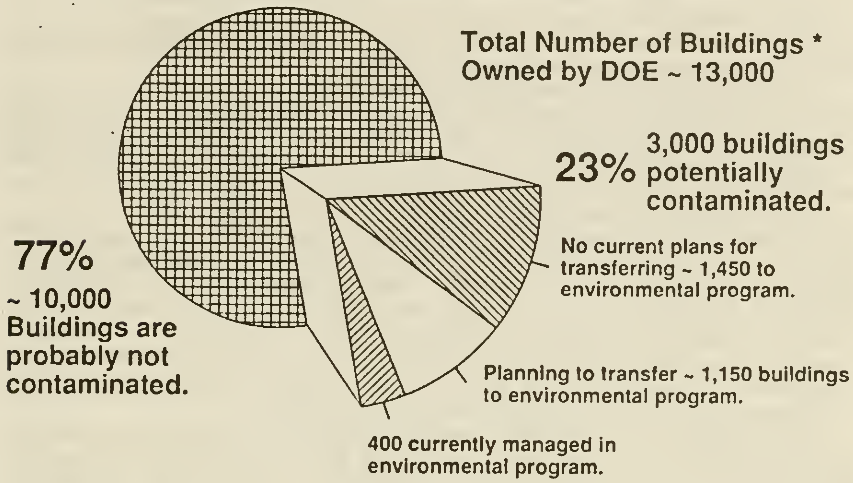
Ultimately, the types of worker retraining the Department conducts will be determined by the future uses of its sites and facilities. The direction taken at each site will be unique and dependent upon the site's needs. Our challenge in each case will be to determine the appropriate form of worker retraining and then to tailor its approach to the site workers' needs.

VII. DOE IS NOW ORGANIZED TO DEAL WITH MASSIVE FACILITIES TRANSITION CHALLENGES

In the wake of the end of the Cold War, thousands of former nuclear weapons facilities—buildings, reactors, reprocessing canyons, laboratories—will require decontamination and decommissioning (D&D). Some of these facilities are enormous—the K–25 building at Oak Ridge is a mile long and covers 137 acres. Of the approximately 13,000 facilities currently in the Department's "Real Property Inventory System," we have estimated that approximately 25 percent (nearly 3,000 facilities) are potentially contaminated (See Figure 1). Much greater evaluation must be done to confirm the actual number.

FIGURE 1

DOE's ENORMOUS DECONTAMINATION CHALLENGES



* Range in size from reactors to garages.
Source: DOE's Real Property Inventory FY 1992

The Department has identified approximately 1,000 facilities as surplus. It would require until beyond 2050 to decontaminate these 3,000 facilities if we could complete 50 buildings per year. The number of facilities in the DOE system is, by contrast, 30 times the number of Federal buildings for all branches of government located in Washington, D.C.

Thus far, the Department has identified approximately 1,000 facilities as surplus. Even this current initial surge of surplus defense facilities, however, is challenging the old DOE system. To deal with these otherwise overwhelming changes in the DOE complex, we have established an Office of Facility Transition and Management within the Environmental Restoration and Waste Management program which will become increasingly important as a result of the burgeoning number and complexity of managing closed facilities.

The Office of Facility Transition will address the following issues:

- Closed facilities are not necessarily ready for D&D until they have been placed in a safe condition. Closed facilities will require even more attention to focus on the industrial safety aspects associated with buildings which are reaching 50 years of life.
- Closed facilities still require continued "landlord" services such as heating, cooling, electricity and security service. These services must be provided efficiently without detracting from other environmental requirements that Environmental Restoration and Waste Management offices are intended to meet.
- Closed facilities require evaluation for future possible industrial use or to plan for decontamination and estimate quantities of waste to be generated.

In addition, this new office greatly increases budget accountability for managing these facilities, so that the costs for these tasks are not "hidden" in other operating program costs. Previous Environmental Restoration and Waste Management budgets often included costs for activities that, however necessary, were not directly related to program tasks such as environmental restoration or waste management. In fact, the decrease in the budget request for waste management ($3.3 billion in FY 1993 to $3.1 billion in FY 1994) results in part from a shift in responsibility for projects that are more appropriately classified as transition activities.

Finally, this new office will help answer several important long-term questions including:

—the total number of facilities requiring D&D;
—the cost and technology requirements for D&D; and
—the potential for coordination between similar D&D projects.

We are proud to have taken the important step of establishing this office.

VIII. A NEW TECHNICAL STRATEGY FOR HANFORD TANKS

Safely managing and disposing of the 61 million gallons of mixed liquid high-level radioactive waste stored in 177 underground tanks at the Hanford Site is probably the most serious challenges facing the Department.

In December 1991, the Department established the Tank Waste Remediation System to integrate all activities related to liquid high-level radioactive waste in tanks at Hanford, including tank safety, tank operations, waste retrieval, pretreatment, immobilization, disposal of low-level wastes, and preparation for disposal of the high-level radioactive tank wastes. The guiding principle for the Tank Waste Remediation System is to minimize environmental, safety, and health risks.

In March 1993 the Department of Energy, with the agreement of the Washington Department of Ecology and the EPA, completed a draft of a 15-month rebaselining study to determine whether planned activities for the management, treatment, and disposal of Hanford high-level radioactive waste continue to be valid in light of the significant changes which have occurred since the original strategy was developed. These changes include the safety concerns associated with high-level radioactive waste tank storage; the technical uncertainties in developing feed pretreatment systems to integrate single-shell tanks into the vitrification program; the inability of some existing facilities to meet environmental regulatory requirements; and the delays associated with the Hanford Waste Vitrification Facility.

The rebaselining study identified significant concerns with the policy, technical, and regulatory basis of the program activities in the Hanford Tri-Party Agreement, and proposed a new technical strategy to remediate the Hanford tank waste. Examples of these concerns included (1) a lack of focus on tank waste safety issues for near-term mitigation and resolution, (2) the need to upgrade essential tank farm infrastructure to support safe and environmentally sound operations, and (3) the need to treat tank waste with the best available technology before disposal. The proposed new technical strategy would integrate the resolution of safety concerns with remediation of the tank waste. The Department, working with the Washington Department of Ecology and the EPA, is engaged in a 6-month negotiation and public involvement effort to determine how best to modify the Tri-Party Agreement.

The new technical strategy will also be needed to address the problems in tank farm operations identified in a Departmental "Red Team" review in early July 1992. The Red Team review, an internal assessment of the status of major programs and projects, identified a number of deeply ingrained and long-standing problems in tank farm operations including: safety concerns, the need for greater operational discipline, and concerns about long-term treatment of liquid high-level waste.

In the interim, the Department is giving the highest priority to resolving tank safety problems. These problems include the periodic release of flammable gases; potentially explosive ferrocyanide compounds; potentially reactive organics; criticality risks; and worker health and safety. Programs have been developed to resolve each of these and other high-level radioactive tank safety issues. Occupational Safety and Health reviews of the high-level radioactive waste tanks have focused on safety risks from organic vapor flammability and health risks from noxious vapor exposure. We must produce results that are protective of public health and the environment. To improve operating procedures, the Department and its major contractors have initiated a site-wide industrial hygiene baselining effort called the Hanford Occupational Exposure Assessment Strategy. The strategy is based on the American Industrial Hygiene Association's 1991 "Strategy for Occupational Exposure Assessment." We have also developed a high-level radioactive waste tank farm site-specific safety and health plan, with additional implementation plans in progress.

Mr. Chairman, you have done a great public service by helping to highlight the Hanford tanks as a problem. We are committed to a truly fresh look at this problem and a program that signals the end of "business as usual." In addition, we are reaching out to take advantage of some extremely talented people regardless of where they are in the DOE system. The Department is working with the Defense Nuclear Facilities Safety Board to design a new program that will address the safety of the high-level waste tanks, including Recommendation 92–4.

Although much has been accomplished, far more remains to be done. The Tank Waste Remediation System is one of the largest and most complex tasks facing the Department, but we are confident that we can meet the challenge successfully.

Thank you for the opportunity to address the Governmental Affairs Committee regarding the environmental problems of DOE and how we intend to address these problems. I look forward to working with you, Mr. Chairman, other members of the

Committee, and concerned citizens as we move forward together in the years to come.

United States Department of Energy

ENVIRONMENTAL MANAGEMENT PROGRAM

Briefing for Secretary Hazel O'Leary
August 17, 1993

M317
revision 1: September 13, 1993

Briefing Contents

- Environmental Management Vision
- Current Situation
- Environmental Management Goals
- Measuring Performance
- Fiscal Realities
- Next Steps
- Where We'll Be

By the year 2000, the Department of Energy Environmental Management program will serve as the benchmark for all public management at the Federal level.

- Program will be driven by a combination of customer expectations and the technical and scientific capabilities of the entire Department of Energy.
- Regulatory compliance will be a given.
- The Environmental Management program will be perceived by its stakeholders to be leading the way towards new standards of excellence.

This supports the new Department of Energy vision: environmental excellence, and science and technology leadership.

We face a significant environmental and political challenge.

- **The scope of work is daunting**: Our mission is to accomplish the cleanup of an unprecedented number of waste sites and contaminated facilities.
- **No consensus on extent of problem**: There is no widely accepted base of information regarding, for example, health risks, to use in our decisionmaking.
- **Lack of credibility**: We must overcome perceptions of mismanagement, fiscal inefficiencies, and insufficient public participation in developing program priorities.
- **Potential mismatch between available resources and expectations.**
- **Lack of applied technology.**
- **Need for integrated approach to the environment**: The critical role of our program must be viewed in terms of the wider Department of Energy mission.

Goal 1: Eliminate and manage the urgent risks and inherent threats that exist in our system.

Performance Objectives:

- Reduce the major safety risks posed by the Hanford high-level waste tanks.
- Complete implementation of the newly created Department of Energy spent fuel management program and reduce the risk associated with storage of spent nuclear fuel in old facilities.
- Address with owner organization any new major threats or safety risks identified as part of facility inventory and characterization process.

Goal 1

ELIMINATE AND MANAGE THE URGENT RISKS AND INHERENT THREATS THAT EXIST IN OUR SYSTEM

Objective 1.1

Reduce the major safety risks posed by the Hanford high-level waste tanks.

Measures:

- Number of needed approvals that have been obtained.
- Measures for each independent step TBD.
- Action complete = 100%.
- Number of Unreviewed Safety Questions (USQ) closed.

Method:

- Establish an updated and approved safety basis for operation of the HLW tanks at Hanford.
  - establish an interim safety basis by August 1994.
  - initial safety analysis report approved by September 1997.
- Eliminate urgent risks posed by flammable gases.
  - mitigate the highest priority flammable gas tank (101-SY).
  - use pump mixing (if effective) by June 1995.
  - if mixer pump is not effective, use/pursue alternative(s).
  - remediate flammable gas Tank 101-SY by March 1999.
  - resolve flammable gas safety issues in other tanks.
  - install necessary monitoring and gas characterization systems by April 1997.
  - mitigate and/or remediate, as necessary.
  - eliminate risk posed by high-heat Tank 106-C.
  - complete required water additions by October 1995.
  - retrieve and transfer waste to double-shell tank by October 1997.
  - close USQs by September 1996.

NOTE: All dates are tentative pending approval of safety initiative, expected by September 3, 1993.

Team : Jill Lytle Glen Sjoblom Tom Sheridan

Goal 2: Provide a safe workplace that is free from accidents, injuries, and adverse health effects.

Performance Objectives:

- Develop a workforce (labor and management) that is skilled, experienced, accountable, and committed to safety and health.
- Identify and mitigate hazards at Environmental Management facilities.

Goal 2
WE MUST PROVIDE A WORKPLACE THAT IS FREE FROM ACCIDENTS, INJURIES AND ADVERSE HEALTH EFFECTS

Objective 2.1

Develop a workforce (labor and management) that is skilled, experienced, accountable and committed to safety and health.

Measures:

- Percent of programs, operations, offices and sites with approved safety and health training curriculums in place and operating.
- Percent of employees (by program, operations office, and site employment level) completing safety and health training curriculum successfully (validated by oral and practical examinations).
- Number of innovative safety programs attaining high levels of safety consciousness and addressing the unique need of each site.

Method:

- Training:
    - identify safety and health training specifications for Federal/contractor senior and mid-level managers and work force by December 1993; ensure availability of required training courses by December 1994; confirm completion of established EM safety and health training curriculum by December 1995.
    - validate content of required training courses and curriculum (on-going).
- Resources:
    - identify EM field and headquarters safety and health resource needs by January 1994; develop documentation for obtaining required resources by March 1994; coordinate and obtain concurrence by April 1994.
    - ensure necessary safety and health skilled staff are in place for all EM by June 1995.
    - establish safety and health critical elements for Federal staff by February 1994; include in annual performance appraisal plans by April 1994.
- General:
    - incorporate safety and health elements in all RFPs, RFOs, contracts and award fee performance plans. Make safety records a requirement for contractor prebid qualifications by September 1994 and continuing.
    - develop innovative and creative programs to convey EM's safety focused message and continuous improvement in safety awareness (ongoing). Identify all staffing needs, field and headquarters, by April 1994.

Team : Randy Scott Gloria Patton Larry Weiner

Goal 2

WE MUST PROVIDE A WORKPLACE THAT IS FREE FROM ACCIDENTS, INJURIES AND ADVERSE HEALTH EFFECTS.

Objective 2.2

Identify and mitigate hazards at EM facilities.

Measures:

- A to be determined percent reduction in total injuries by site, by program, and by contractor.
- Decreased Worker Compensation Insurance Premium rate (long term) as calculated by the Experience Modification Rate (EMR) and accident frequency.
- Annual percentage reduction in Occupational Safety and Health Administration recordable injury rates based on the site average for the preceding year.

Method:

- Identify and correct workplace hazards by Federal and contractor workforce (all levels).
- Have in place approved SARs and HASPs by December 1995.
- Establish procedures to merge S&H priorities of transitioned facilities with those within the existing EM program by February 1994.

Team : Randy Scott Gloria Patton Larry Weiner

Goal 3: Change the system so that it is under control managerially and financially.

Performance Objectives:

- Establish and maintain a cost and schedule baseline for the Environmental Management program that will increase public confidence that taxpayer dollars are being spent effectively.
- Institute a budget formulation process that integrates the planning and budget activities of the Environmental Management program and is based on the input of field managers, stakeholders, and headquarters managers.
- Improve the timeliness and quality of the information available for monitoring budget execution and tracking progress against cost and schedule milestones.
- Match Federal workforce requirements with approved program scope and acquire and train the necessary high caliber workforce to meet changing program needs.
- Implement a disciplined contractor control system focused on enhanced procurement planning, competition, contractor incentives, and increased government oversight.
- With full stakeholder involvement, identify and assess the magnitude of future Environmental Management program alternatives to support realistic outyear decisionmaking.

Goal 3

WE MUST HAVE A SYSTEM THAT IS UNDER CONTROL MANAGERIALLY AND FINANCIALLY

Objective 3.1

Establish and maintain a cost and schedule baseline for the EM program that will increase public confidence that taxpayer dollars are being spent effectively.

Measures:

- EM baseline team is established and meeting regularly by September 15, 1993.
- Complete a review of the ER baselining process by October 1993 and identify any significant "lessons learned" for dissemination to the field.
- Interface network is published by November 1993.
- Assumptions defined and coordinated by December 1993.
- Realistic schedule developed for baselining projects by December 1993.
- Evaluate all baselines submitted for approval for compliance with both DOE orders and EM guidelines/ assumptions.
- Baseline 25% of Environmental Restoration's Major System Acquisitions (through Records of Decision) each quarter throughout the remainder of the program (with objective to have 100% complete and submitted to Congress by the end of FY 1994).
- Overall EM baseline established and submitted to Congress by mid FY 1995.
- Coordinating with the field, publish effective baseline control directives and procedures developed by June 1994 that convey a uniform, rational approach to the field.
- Implement baseline reviews that indicate which project baselines are valid and meaningful or identify areas requiring improvement.
- Implement cost and productivity improvements identified as a result of ongoing EM initiatives such as the Benchmarking for Cost Initiative, the Contract Reform Sub-Team on Indirect Costs, and the Cost Reduction Task Force. Quantify savings and track progress against each cost reduction strategy/action selected.

Method:

- Charter a 5-10 member team with appropriate representation from EM offices to coordinate the development of the EM program baseline.
- Use the Environmental Restoration's baselining effort as a foundation for establishing the overall EM program baseline process.

Team : Willis Bixby Steve Cawan Lenora Lewis

Six goals address the Department's Environmental Management vision.

1. Eliminate and manage the **URGENT RISKS AND INHERENT THREATS** that exist in our system.
2. Provide a **SAFE WORKPLACE** that is free from accidents, injuries, and adverse health effects.
3. Change the system so that it is **UNDER CONTROL** managerially and financially.
4. Be more **OUTCOME ORIENTED**.
5. Focus the **TECHNOLOGY DEVELOPMENT PROGRAM** on major obstacles to progress and involve the best talent in the Department of Energy and national science and engineering communities.
6. Develop a **STRONGER PARTNERSHIP** between the Department of Energy and its stakeholders.

Goal 1

ELIMINATE AND MANAGE THE URGENT RISKS AND INHERENT THREATS THAT EXIST IN OUR SYSTEM

Objective 1.2

Complete implementation of the newly created DOE spent fuel management program and mitigate the urgent risk associated with spent nuclear fuel.

Measures:

- No Defense Nuclear Facilities Safety Board recommendations for the spent fuel program.
- Percent of technically and managerially qualified personnel on board.
- DOE Complex-wide spent Nuclear Fuel Plan coordinated and published by end of March 1994.

Method:

- Formally establish and staff spent fuel program.
- Complete K-East Basin facility and spent fuel assessment by November 1993.
- Complete preliminary assessments of major spent fuel and storage facilities by September 1994.
- Complete complex-wide and foreign research reactor NEPA reviews—June 1995.
- Complete canning of K-East basin spent fuel by January 1996.
- Complete foreign research reactor dry storage capacity by June 1997.
- Remove sludge from K-East basin and clean basin water by August 1998.
- Close Unreviewed Safety Questions regarding 603 basin by January 1995.
- Complete relocation of spent fuel from 603 basin by 2000.
- Complete receipt of foreign research reactor spent fuel by 2012.

Team : Jill Lytle Glen Sjoblom Tom Sheridan

Method (continued):

- Map out an “interface network” which defines project milestones and interdependencies.
- Identify and define baseline assumptions including the basic criteria and guidelines needed to develop an effective baseline.
- Generate and implement a schedule for establishing the EM program baseline.
- Submit EM baselines to Congress in accordance with the Defense Reauthorization Act of 1993.
- Identify relevant DOE baseline directives and procedures and develop new EM directives and procedures for baseline control.
- Conduct EM baseline reviews to ensure project baselines are valid and realistically reflect project scope.
- Identify potential areas for cost and productivity improvements to ensure taxpayer dollars are being spent effectively.

Goal 3
WE MUST HAVE A SYSTEM THAT IS UNDER CONTROL MANAGERIALLY AND FINANCIALLY

Objective 3.2

Institute a budget formulation process that integrates the planning and budget activities of the EM program and is based on the input of field managers, stakeholders, and headquarters managers.

Measures:

- Develop an integrated master schedule by the end of the first quarter of FY 1994 for the FY 1996 budget cycle for distribution within headquarters and to the field.
- Issue clear guidance to the field by the end of the first quarter of FY 1994 for the FY 1996 process.
- Develop EM budget directives and procedures delineating the process for EM by April 1994.
- Prepare and conduct a training course, at each field office, on developing better cost estimates by the beginning of the FY 1997 cycle.
- Monitor progress and quality of input against the master schedule milestones for budget development, submission, and approval.

Method:

- Develop an integrated planning and budget process/master schedule involving stakeholders as early in the process as possible.
- Identify and develop EM directives and procedures to improve the quality of our planning and budgeting process and with consistent program-wide guidance.
- Identify what directives and procedures exist and resolve duplication and conflicts.
- Improve the independent cost estimating capability in the field.
- Promulgate consistent program-wide guidance within headquarters and to the field.

Team : Willis Bixby Steve Cowan Lenara Lewis

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Goal 3
WE MUST HAVE A SYSTEM THAT IS UNDER CONTROL MANAGERIALLY AND FINANCIALLY

Objective 3.3

Improve the timeliness and quality of the information available for monitoring budget execution and tracking progress against cost and schedule milestones.

Measures:

- Conduct independent reviews of the accuracy and completeness of the data. Trend improvements with a goal of 95% correlation between FIS and PTS data by end of FY 1994.
- Conduct a reconciliation of the FIS/PTS linkage on a monthly basis beginning in June 1994.

Method:

- Examine alternatives for timeliness and accuracy to the Financial Information System (FIS) and the Progress Tracking System (PTS).
- Improve accuracy and timeliness of actual data from the field.
- Improve the linkage between the Department's FIS and PTS.

Team : Willis Bixby Steve Cowan Lenora Lewis

Goal 3

WE MUST HAVE A SYSTEM THAT IS UNDER CONTROL MANAGERIALLY AND FINANCIALLY.

Objective 3.4

Match Federal workforce requirements with approved program scope and acquire the necessary high caliber workforce to meet changing program needs.

Measures:

- Establish a task force to assess current and future staffing requirements. (Complete)
- Task force will provide a justification for the 1995 Internal Review Budget staffing request by September 15, 1993.
- Task force will develop staffing models for outyear budget development and justification that will provide a 95% level of confidence in annual staffing requests.
- Convert 1000 M&O contractors to Federal employees; percent of contractors converted per quarter to be determined based on OMB approval.
- Absorb 600 employees from other decreasing DOE programs.
- With the acquisition of a trained Federal workforce, reduce the dependence on support service contracts by a minimum of 10% per year in both FY 1994 and FY 1995.

Method:

- Develop a defensible basis for determining EM's federal workforce requirements.
- Redirect existing DOE workforce to remediation and waste management activities.
- Train EM workforce for unique responsibilities related to environmental remediation and waste management.
- Reduce EM's dependence on contractors for planning and managing the program.

Team : Willis Bixby Steve Cawan Lenora Lewis

Goal 3

WE MUST HAVE A SYSTEM THAT IS UNDER CONTROL MANAGERIALLY AND FINANCIALLY

Objective 3.5

Implement a disciplined contractor control system focused on enhanced procurement planning, competition, contractor incentives and increased government oversight.

Measures:

- Initiation of programmatically justified contract actions that result in timely contract awards without procurement problems (by FY 1995).
- The contract fee determinations for Department management approval will specify measurable contractor achievement clearly linked to contract award fee and other incentive payments (by December 1994).
- Cost savings resulting from maximum utilization of competitive contracting (by FY 1995).

Method:

- Provide a listing of planned procurements as derived from current Department contract data bases and surveys to identify new requirements.
- Match and prioritize EM's contracting requirements with available resources.
- Convert subjective award fee criteria in contracts to objective, measurable incentive fee criteria.
- Increase EM use of fixed-price and other competitively solicited contracts with work scope defined in performance based terms to support facility management and other services as well as for remediation contracting.

Team : Willis Bixby Steve Cowan Lenora Lewis

Goal 3

WE MUST HAVE A SYSTEM THAT IS UNDER CONTROL MANAGERIALLY AND FINANCIALLY.

Objective 3.6

With full stakeholder involvement, identify and assess the magnitude of future EM program alternatives to support realistic outyear decision making.

Measures:

- Facilities investigated and scoping condition assessment performed by December 1993.
- Facilities selected for FY 1996 budget cycle by February 1994.
- Transfer procedures developed and in place by June 1994.
- Incorporate future planning options in State and Tribal Government Working Group deliberations and departmental strategic planning in support of the FY 1996 budget cycle.

Method:

- Conduct a condition assessment and inventory of all DOE facilities.
- Develop a process for transfer of facilities from other DOE programs to EM.
- Assess options for alternate uses and/or remediation end states for all surplus facilities.

Team : Willis Bixby Steve Cowan Lenora Lewis

Goal 4: Be more outcome oriented.

Performance Objectives:

- Transfer excess land to General Services Administration or other organizations.
  - Develop land use plans for all DOE installations by end of FY 1995.
  - Identify five land parcels/buildings for potential accelerated transfer to General Services Administration by end of FY 1996.
- Provide needed capacity for treatment, storage, and disposal of waste to address backlog and newly generated waste in a timely manner.
  - Site Treatment plans approved and compliance orders issued by October 1995.
  - Initiate treatment of low-level mixed waste at the Waste Experimental Reduction Facility by 3rd Quarter FY 1994 (assuming State approval under permit).
  - Initiate operations with radioactive waste at Defense Waste Processing Facility at Savannah River Site.

Goal 4: Be more outcome oriented.

(continued)

Performance Objectives:

- Use early removals under CERCLA, voluntary corrective actions under RCRA, and early decontamination and decommissioning projects to reduce risk and program costs.
    - Identify and initiate action on fifteen additional early removals, voluntary corrective actions and early D&D projects by end of FY 1994.
- Develop an effective risk-based cleanup strategy.
    - Develop a base-line analysis of current estimates of full cost of cleanup of Department of Energy facilities using current risk environmental standards by October 1994.
    - Develop an analysis of expected reallocation of resources due to adoption of risk-based standards by October 1994.

Goal 4
WE MUST HAVE A SYSTEM THAT IS MORE OUTCOME ORIENTED

Objective 4.1
Transfer excess land to General Services Administration.

Measures:
- All DOE installations have developed land use plans by end of FY 1995.
- Identify five land parcels/buildings for potential accelerated transfer to GSA by end of FY 1996.
- Transfer two land parcels to GSA by end of FY 1996.

Method:
- Establish a land use decision process.
  - form an EM work group to define process for integrating stakeholder involvement/input into a decision process that results in a site-specific land use plan.
  - implement process at all sites.
  - complete process and incorporate results into baselines, work plans, and risk-based planning.
- Accelerate transfer process.
  - using site-specific land use plans, identify parcels/buildings for expedited transfer to General Services Administration.
  - accelerate assessment/D&D of identified parcels/buildings to obtain a no action ROD for those without contamination. For those with minimal contamination, accelerate removal action/D&D to reduce risk to acceptable levels for the use selected.
  - involve stakeholders in all phases of the land-use decision process to expedite approval by local communities.

Team : Pat Whitfield Keith Klein Tom Grumbly

Goal 4

WE MUST HAVE A SYSTEM THAT IS MORE OUTCOME ORIENTED.

Objective 4.2

Provide needed capacity for treatment, storage, and disposal of waste to address backlog and newly generated waste in a timely manner.

Measures:

- Conceptual site treatment plans submitted by October 1993.
- Draft site treatment plans submitted by August 1994.
- Final site treatment plans submitted by February 1995.
- Site treatment plans approved and compliance orders issued by October 1995.
- Initiate recycling process for 25% of recyclable materials by end of FY 1996.
- Initiate treatment of low level mixed waste at the Waste Experimental Reduction Facility by 3rd Quarter FY 1994 provided that the State of Idaho approves the incineration of mixed waste under the existing air permit.
- Initiate production operations under interim status at the Controlled Air Incinerator at LANL by 3rd Quarter FY 1995.
- Initiate radioactive operations at Defense Waste Processing Facility at Savannah River Site by December 1995, pending ESAAB approval.

Method:

- Design, construct, and operate facilities to provide needed TSD capacity.
  - develop specific plans and commitments to construct the needed treatment, storage, and disposal capacity on schedule based on the Federal Facility Compliance Act (FFCA) site treatment plan process, and the CERCLA and RCRA remediation decision processes.
  - obtain regulator and other stakeholder input throughout the capacity development process to facilitate approval of decisions.
  - identify technology needs and pursue appropriate technology development.
  - design, construct, and operate facilities on schedule.
- Pursue waste minimization in landlord, waste management, remediation, and D&D activities.
- Complete required performance assessments for disposal sites.
  - define disposal waste acceptance criteria for disposal sites.

Team: Pat Whitfield Keith Klein Tom Grumbly

Goal 4
WE MUST HAVE A SYSTEM THAT IS MORE OUTCOME ORIENTED

Objective 4.3

Use early removals under CERCLA, voluntary corrective actions under RCRA, and early decontamination and decommissioning (D&D) projects to reduce risk and program costs.

Measures:

- Identify and initiate action on fifteen additional early removals, voluntary corrective actions, and early D&D projects by end of FY 94.
- Identify and initiate action on twelve additional early removals, voluntary corrective actions, and early D&D projects by end of FY 95.
- Identify and initiate action on eight additional early removal actions, voluntary corrective actions, and early D&D projects by end of FY 96.
- Complete ten of the above actions/projects by end of FY 1995 and calculate risk/cost reduction.
- Complete an additional eight of the above actions/projects by the end of FY 1996 and calculate risk/cost reduction.

Method:

- Identify high payoff projects for early removal, voluntary corrective action, and early D&D.
  - select criteria for listing of projects for early action (including working group formation).
  - identify costs saving measures for early action projects (program costs and schedule savings).
  - select high payoff projects for accelerated action.

- Implement cost saving measures for early action projects.
  - streamline documentation and approval process for early action projects.
  - facilitate stakeholder acceptance of the use of early action projects.
  - conduct early removal actions, voluntary corrective actions and early D&D.

Team : Pat Whitfield Keith Klein Tom Grumbly

Goal 4
WE MUST HAVE A SYSTEM THAT IS MORE OUTCOME ORIENTED

Objective 4.4
Develop an effective risk-based cleanup strategy.

Measures:

- Receipt of an acceptable Strategy & Action Plan for the Integrated Risk-Analysis Program due by September 1993.
- Compilation and analysis of all existing risk related projects in EM by October 1993.
- Restructure EM-50 to coordinate risk studies by December 1993.
- Develop an analysis of expected reallocation of resources due to adoption of risk-based standards by October 1996.
- Renegotiate those agreements where greatest discrepancies exist between current estimates and risk-based approach by end of FY 1996.

Method:

- Establish an Integrated Risk-Analysis Program to develop a process for determining site-specific risk-based cleanup standards using future land use alternatives to reduce cleanup costs.
- Develop a strategy and action plan for implementing the Integrated Risk-Analysis Program.
- Negotiate an agreement with the National Academy of Science to develop a program that will involve national and local stakeholders in an advisory & oversight group to guide the Integrated Risk-Analysis Program.
- Develop process for involving local stakeholders in decision process for cleaning up sites at lower cost but to an acceptable level of risk.
- Identify all risk studies currently underway in EM and coordinate their focus in FY 1994 to accelerate the implementation of the Integrated Risk-Analysis Program.

Team : Pat Whitfield Keith Klein Tom Grumbly

Goal 5: Focus the technology development program on major obstacles to progress and involve the best talent in the Department of Energy and national science and engineering communities.

Performance Objectives:

- Identify major technical obstacles to Environmental Management program progress.
- Develop an operational structure to optimize program focus on identified major obstacles and to utilize best talent available.
- Show results in one or more major technological obstacle areas.

Goal 5

WE MUST HAVE A TECHNOLOGY DEVELOPMENT PROGRAM THAT IS FOCUSED ON MAJOR OBSTACLES TO PROGRESS AND THAT INVOLVES THE BEST TALENT IN THE DEPARTMENT OF ENERGY AND NATIONAL SCIENCE AND ENGINEERING COMMUNITIES

Objective 5.1

Identify major technical obstacles to EM Program progress.

Measures:

- Identify six primary technical problems for revised program focus by August 15, 1993.
- Develop process for identification of at least six additional areas for focus by August 25, 1993.
- Gain at least 75% support of DOE laboratory management by August 25, 1993.

Method:

- Examine available data: e.g., roadmaps, project baselines, compliance agreements, technology needs assessments, five-year plans, impediments to implementation, etc.
- Get stakeholder input.
- Evaluate commercial experience for relevant input.
- Solicit DOE Laboratory management input.

Team : Clyde Frank Rich Aiken Jack Baublitz

GOAL 5

WE MUST HAVE A TECHNOLOGY DEVELOPMENT PROGRAM THAT IS FOCUSED ON MAJOR OBSTACLES TO PROGRESS AND THAT INVOLVES THE BEST TALENT IN THE DEPARTMENT OF ENERGY AND NATIONAL SCIENCE AND ENGINEERING COMMUNITIES

Objective 5.2

Develop an operational structure to optimize program focus on identified major obstacles and to utilize best talent in available.

Measures:

- Structure approved by Assistant Secretary by August 15, 1993.
- Empowerment of strategic laboratory council by Assistant Secretary and 75% of laboratory directors by August 15, 1993.
- Six stakeholder meetings per year.
- Four of six management teams in the new structure are operating by October 1, 1993.

Method:

- Empower strategic laboratory council.
- Solicit customer input.
- Continue stakeholder input.
- Peer review.
- Develop transition plan.

Team : Clyde Frank Rich Aiken Jack Baublitz

Goal 5

WE MUST HAVE A TECHNOLOGY DEVELOPMENT PROGRAM THAT IS FOCUSED ON MAJOR OBSTACLES TO PROGRESS AND THAT INVOLVES THE BEST TALENT IN THE DEPARTMENT OF ENERGY AND NATIONAL SCIENCE AND ENGINEERING COMMUNITIES

Objective 5.3

Show results in one or more major technological obstacle areas.

Measures:

- Four new technologies per obstacle per year developed.
- Six improved technologies per obstacle per year.
- Percent technologies implemented versus initiated. (success >20%)
- Dollars earned by private sector from commercialization of DOE technologies.
- Number of dollars leveraged with the private sector or other agencies.

Method:

- Target most likely technological areas.
- Focus resources.
- Implement aggressive progress review and feedback effort.
- Empower lead organizations/individuals.

Team : Clyde Frank Rich Aiken Jack Baublitz

Goal 6: Develop a stronger partnership between the Department of Energy and its stakeholders.

Performance Objectives:

- Promote meaningful, two-way communication and participation with the public in program activities -- including priorities and spending -- and increase public ownership in Environmental Management program, including program successes and problems.
  - Continue soliciting input from stakeholders on FY 1994 and FY 1995 programs and priorities.
  - Establish new agreements in 1993 with Tribal organizations to promote Tribal participation in Environmental Management program.
  - Establish Federal agency working group chaired by the Office of Management and Budget.

Goal 6: Develop a stronger partnership between the Department of Energy and its stakeholders.

(continued)

Performance Objectives:

- Assist Congress and other stakeholders in developing a better understanding of our achievements and challenges.
  - Ensure continuing contact with members of Congress.
  - Meet with States to request input on options for streamlining the Environmental Management program.
  - Schedule "summit meeting" in early 1994 with governors on future of Environmental Management program.
  - Develop new public-information materials to effectively convey program mission and challenges.

Goal 6

WE MUST DEVELOP A STRONGER PARTNERSHIP BETWEEN DOE AND ITS STAKEHOLDERS

Objective 6.1

Promote meaningful, two-way communication and participation with the public in the formulation of EM programs, priorities and spending levels and increase public ownership in EM, including program successes and problems.

Measures:

- Track ability to renegotiate enforceable agreements without dispute resolution.
- Apply FY 1994 comments to the FY 1995 program.
- Submit FY 1996 budget request that reflects a stakeholder-supported program.
- Conduct annual audit of public participation program, with first annual report issued in May 1994.

Method:

- Develop guidance memorandum from T. Grumbly to Operations Officers on stakeholder outreach activities and procedures for dealing with stakeholder comments on:
  - the allocation of FY 1994 appropriations; and
  - the formulation of the FY 1995 program.

Release memorandum on September 15, 1993.

- Develop public information on methods the public can use to have substantial involvement in EM planning.

Issue "Public Participation Starter Kit" by December 1993.

- Promote Tribal interactions by maintaining current agreements/grants; continuing efforts to establish funding guidelines; and establishing a new cooperative agreement with representative organizations such as the National Congress of American Indians (NCAI) or the council of Energy Resource Tribes (CERT) to promote broad opportunities for Tribal involvement in planning and dissemination of EM information.

Review proposed actions with Tribal members of STGWG on August 9, 1993; begin negotiations with Tribal representative organization in Fall of 1993.

- Formalize interactions with other Federal agencies by establishing an OMB working group to meet bi-monthly, with T. Grumbly as co-chair. Focus on Federal facilities issues, including budget issues and the need for uniform, national perspective on part of EPA.

Team : Ellen Livingston-Behan Dotti Whitt David Waldrop

Method (continued):

Convene first OMB working group in early September 1993. (OMB contacted on August 3, 1993 to request such a meeting be planned.)

- Brief STGWG on plans for increased stakeholder involvement, and request STGWG to develop their own plan for stakeholder involvement.

D. Waldrop briefed STGWG on August 9, 1993 and will prepare a summary of the group's input. STGWG will be requested to complete plan for stakeholder involvement by the next STGWG meeting (no later than December 1993).

- Transform EMAC into senior advisory level group that has input on wide-range of EM planning and management issues.

Discuss option with EMAC at the September 1993 meeting, and begin operation of EMAC under revised role by December 1993.

Goal 6

WE MUST DEVELOP A STRONGER PARTNERSHIP BETWEEN DOE AND ITS STAKEHOLDERS

Objective 6.2

Assist Congress and other stakeholders in developing a better understanding of our achievements and challenges.

Measures:

- Track number of enforcement actions based on DOE's failure to provide adequate funding or timely notice of deficiencies.
- Categorize incoming letters and press accounts to measure reduction of complaints.

Method:

- Bring in independent experts to assist in defining a new public outreach program and to develop a publication on the EM program, including mission, accomplishments and challenges.

Use existing procurement process to bring contractors on board by mid-September 1993. (Atomic Energy Agency of Canada contacted on September 3, 1993 to request points of contact and samples of recent public-information materials.) Define public outreach program and issue EM publication by January 1994.

- Increase efforts to meet with State representatives to:
  - seek State input on, and request support for, Administration and Department goals of using scarce resources more effectively, addressing with the States the changed mission of the Department, and balancing more fully the interests of stakeholders in Departmental activities.
  - identify options for working more effectively with State governments during review of EM programs.
  - seek input on a process that should be used in the event of insufficient appropriations.

Meetings will involve E. Livingston-Behan, EM; J. Werner, consultant to EM; and Assistant Managers for EM from DOE Operations Offices. Briefings on the meetings will be scheduled with all DASs and EM-1, and a subsequent "Summit meeting" involving Governors, the Secretary of Energy and T. Grumbly will be considered.

Team : Ellen Livingston-Behan Dotti Whitt David Waldrop

Method (continued):

Preliminary States to be visited (by end of August).
- South Carolina
- Tennessee
- Colorado
- New Mexico
- Ohio

Second round of State visits (September):
- California
- New York
- Texas
- Idaho
- Washington

“Summit meeting” involving governors, the Secretary of Energy and T. Grumbly, if needed, will be scheduled in December 1993 or January 1994.

- Schedule courtesy visits by T. Grumbly to key Congress members and their staff.

Meetings will be scheduled, at a rate of two to three per month, with the following individuals:
- Congressman Bill Baker (R-CA), September 8, 1993, 4:30PM
- Congressman Norm Mineta (D-CA), September 8, 1993, 5:15PM
- Senator Ben Nighthorse Campbell (D-CO)
- Dick Frandsen (House Energy and Commerce Committee, Majority Counsel)
- Senator Max Baucus (D-MT) (Chair, Senate Environment and Public Works Committee)
- Senator John Chafee (R-RI) (Ranking Minority Member, State Environment and Public Works Committee)

Method (continued):

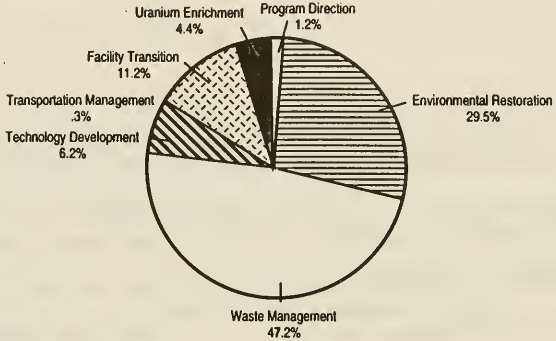
- Kathy Vanway (House Energy and Commerce Committee, Minority Staff)
- Dan Berkovitz (Senate Environment and Public Works Committee, Majority Counsel)
- John Zirschky (Senate Environment and Public Works Committee, Minority Staff)
- Harlan Watson (House Science, Space and Technology, Subcommittee on Science, Minority Staff Director)
- Senator Jim Sasser (D-TN) - (Member of the Senate Governmental Affairs Committee and the Senate Appropriations Committee)
- Congressman Michael Oxely (R-OH) (Ranking Minority Member on House Energy and Commerce, Subcommittee on Transportation and Hazardous Materials)
- Keith Cole (House Energy and Commerce, Subcommittee on Transportation and Hazardous Materials, Minority Counsel)

- Increase focus on training and employment opportunities by establishing contract/cooperative agreement with independent organization to identify employment needs and career opportunities related to EM.

Establish agreement with the League of Women Voters to publish "Key to Careers in Environmental Management" by December 1994.

The environmental management mandate includes a broad range of responsibilities beyond "cleanup".

President's FY 1994 Request
Environmental Restoration and Waste Management



Dollars in Millions	
⊟ Environmental Restoration	1,909
☐ Waste Management	3,047
▧ Technology Development	401
■ Transportation Management	20
▨ Facility Transition	721
■ Uranium Enrichment D&D Fund	286
☐ Program Direction	78
Total	6,462 *

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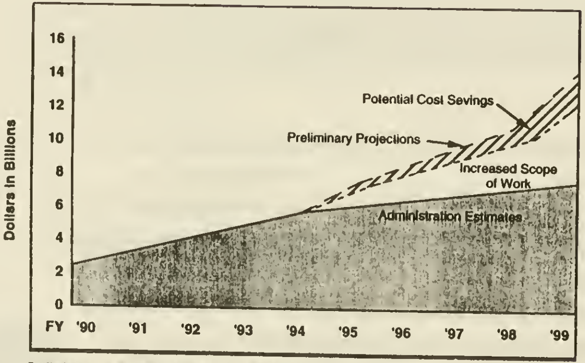
* *Recent House Appropriations Committee action included a general reduction of $280 million. The impact of this reduction is currently being assessed. Senate Appropriations Committee action is expected in September.*

Our cleanup responsibilities continue to grow.

(continued)

- **We are ending a phase of primarily site/waste characterization and will be initiating major projects as:**

  - Records of Decision are completed and cleanup actions begun,
  - Waste treatment and disposal facilities are constructed, and
  - Large numbers of facilities transfer to Environmental Management.



Preliminary Projections - Unvalidated Field Office cost estimates
Increased Scope of Work - Increased cost savings through efficiencies and cost reductions
Administration Estimates - FY 1994 Presidential budget plus approximately 6% annual growth (real and inflation)

- It appears requirements and resources are diverging.
- All effort will be made to constrain costs.
- The Department can probably not completely bridge the gap.

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The culture change currently taking place at the Department of Energy affects the way decisions are made and the way we do business.

Defense-oriented Department of Energy		*Environmental-oriented Department of Energy*
• Secretive • Need-to-know • Compartmentalized	→	• Open • Consensus based • Integrated

- **In this transition:**
  - The FY 1995-1996 period will require an organizational ramp-up of additional Environmental Management employees in both operations offices and Headquarters.
  - Need for retraining of employees from the weapons complex to prepare for environmental responsibilities.

- **We must actively participate in Department-wide decisionmaking in areas affecting the Environmental Management program:**
  - Plutonium disposition,
  - Spent nuclear fuel/irradiated targets,
  - Flexibility in contracting,
  - Pollution prevention/minimization,
  - Uranium recycling.

We will develop performance metrics at all levels of the organization to meet stated goals.

- Ensure that responsibilities are clearly defined -- that people know what is expected and have the tools to deliver.
- Hold top management accountable for near-term results, develop outcome-oriented strategic plan for longer-term, and confront major issues that impede progress.
- Increase flexibility for planning and management at the site level.
- Give stakeholders a meaningful role in resource allocation, land use, technology, facility siting, and other key decisions.

Tangible environmental results are the ultimate of the Environmental Management program.

In the near future, we will:

- Make progress toward reducing urgent risks facing the program, including the tanks at Hanford.
- Provide a safe workplace at Environmental Management facilities.
- Implement managerial and financial controls to increase efficiency and also our credibility with our public.
- Demonstrate on-the-ground accomplishments based on outcome-oriented program.
- Focus our technology development program to meet the challenge of moving from characterization to environmental restoration.
- Work with our stakeholders in determining Environmental Management priorities and decisions to ensure the best program is implemented.

PREPARED STATEMENT OF SHERRI WASSERMAN GOODMAN

Mr. Chairman:

I. INTRODUCTION

Thank you for the opportunity to testify on the Department of Defense environmental cleanup program. I am honored to be here today as the Deputy Under Secretary of Defense for Environmental Security. Today I will address DoD's new environmental program with emphasis on our cleanup program including:

- DoD commitment to the environment;
- our commitment to the Clinton Administration's approach to cleanup;
- our new environmental program—C3P2 plus technology;
- our "common sense" approach to cleanup;
- our "fast-track" cleanup at base closures; and
- other cleanup challenges and our strategy to overcome them.

II. DOD ENVIRONMENTAL COMMITMENT—NEW DUSD(ES)

Secretary Aspin's creation of a new position of Deputy Under Secretary of Defense for Environmental Security signals the importance he attaches to the environment and to the defense infrastructure, which is essential to maintaining a healthy environment. By raising environment to the Deputy Under Secretary level, Secretary Aspin is demonstrating his belief that environmental security, including the effective management of environmental programs, is a high priority for DoD.

We recognize that during the cold war, the U.S. did not place a high priority on environmental protection. This administration recognizes that the post-cold war era requires a new "common sense" approach to solving DoD's environmental problems: common sense approach that gains the public trust—trust that the Department of Defense will faithfully execute our defense environmental security programs to fully protect human health and the environment—trust that the Department of Defense will be a careful steward of the public's money.

Our common sense approach must start with a fundamental change in the way the Department solves environmental problems. Our new approach to environmental security reflects the President's efforts to implement policies designed to create environmental partnerships. We will pursue this approach through partnerships with other Federal agencies, states, industry, the public, and the Congress. These partnerships are based on two fundamental relationships.

First, our national security can and must include protection of the environment; we must fully integrate environmental security concerns into our defense policies. I define environmental security as ensuring responsible environmental performance in defense operations and assisting to deter or mitigate impacts of adverse environmental actions leading to international instability.

The second fundamental relationship is between the environment and the economy. We must have a strong economy if we are to protect our nation, and President Clinton believes that protecting the environment and improving the economy go hand in hand.

Secretary Aspin is following the President's lead by fully integrating environmental considerations into our defense policy. This approach is being implemented by his creating this office of environmental security with a mandate to ensure that we protect the environment in our defense operations and that we use our environmental stewardship to promote economic growth, while creating strong environmental partnerships.

III. C3P2 PLUS TECHNOLOGY

I've adopted a new term to describe our environmental programs—C-cubed, P-squared—it stands for cleanup, compliance, conservation, and pollution prevention. It is intended to demonstrate that we need to change the way we do business. Cutting across all four of these programs is technology.

CLEANUP

The first part of C3P2 is cleanup. Since cleanup is the primary focus of this hearing, I will address it in detail later in my testimony.

COMPLIANCE

The second C in C-cubed is compliance. While cleanup deals with the past, the compliance program deals with the present—the way we comply with current laws and regulations to prevent contamination. Compliance encompasses operation of our installations on a daily basis to meet air and water permits, maintenance and repair to keep environmental treatment facilities in good working order, and construction to meet new standards and increased capacity.

Our goal is to achieve full and sustained compliance with all legal environmental requirements—its a great challenge. This challenge arises from the variety and scope of DoD installations and activities, the growth and complexity of Federal, state and local requirements, and deadlines which do not coincide with the lengthy budget cycle.

To meet our goal, we believe we need to:

- take a hard look at our environmentally sensitive systems such as sewage treatment plants and industrial emission controls;
- balance capital investment decisions with future regulatory conditions; and
- make smarter business decisions.

CONSERVATION

The third C is conservation. The Department is steward for 25 million acres of public land, representing all of our country's major land types and containing sensitive ecosystems and endangered species, irreplaceable historic and archeological sites, and many other important natural and cultural resources. We face a challenging task protecting and enhancing the quality of these resources while supporting the military mission.

Because military activities can cause damage, we are undertaking measures to integrate our training needs and to develop technological solutions. Our technology needs include improving our capability to inventory, monitor, and protect the resources entrusted to our care as well as using computer simulations to reduce the impact of field operations.

DoD land maintenance and fish and wildlife programs include forestry management and agricultural outleases which benefit the public as well as DoD. Our conservation programs identify and protect soils, wetlands, plants, animals, habitat, ecosystems, historic buildings and objects, and archeological sites and artifacts. Our integrated natural resource management plans include land, forest, fish, and wildlife, and outdoor recreation components.

The Conservation program must protect our natural and cultural resources for future generations. Threatened and endangered species, habitats, and cultural resources must be protected. We will give highest priority to programs and projects that reduce the chances of losing these irreplaceable resources.

POLLUTION PREVENTION

P-squared or pollution prevention is our future, and perhaps, the most important pillar of our environmental programs. As EPA Administrator Carol Browner stated:

"Preventing pollution by elimination or reduction of waste at the source is key to this Administration's commitment to providing a healthy economy that meets our needs today, while preserving the environment for our children and future generations to enjoy."

Our investments in pollution prevention are part of the overall investment in each particular program. They are included as part of system development, environmental compliance, military construction, etc. These investments are not currently tracked separately.

ENVIRONMENTAL TECHNOLOGY

A strong environmental technology program must support each of the environmental program areas. We need to focus our technology efforts in three areas:

(1) Developing a priority setting system for environmental technology to better target R&D to high payback areas;

(2) Using the Strategic Environmental R&D Program structure more effectively by applying funds to real environmental needs; and

(3) Aggressively strengthening partnerships with regulators, states, and the public to get support for testing and fielding of innovative technologies.

IV. DOD CLEANUP—A COMMON SENSE APPROACH

DoD is responsible for environmental contamination resulting from decades of operations both in the U.S. and overseas. The magnitude of our environmental problems continues to grow as the world's militaries deactivate nuclear, chemical, and conventional weapons. DoD currently has about 1,800 military locations in the U.S. and at many locations overseas. Within the United States, about 10,185 sites are being actively worked and 8,610 are classified response complete. Our cleanup appropriation was $1.2 billion in FY 1993 and the request for FY 1994 is budgeted for $2.3 billion. The estimated total cost of our cleanup program is expected to be at least $25 billion. The vast majority of our contaminants are not unlike those found at private sector industrial complexes. Our contaminants include:

- Fuels and solvents—such as gasoline, diesel and jet fuel, degreasers and cleaning compounds are found at about 60% of our sites.
- Toxic and hazardous waste—which include heavy metals such as lead and mercury, explosive compounds, caustic cleaners, dyes, paints and strippers are a problem at about 30% of our sites.
- The remaining 10% of our sites are somewhat less similar to the private sector and consist of unexploded ordnance (approximately 8%) and low level radioactive waste such as electron tubes, and self-luminous dials, gauges and circuit breakers (approximately 2%).

Since the formal Defense Environmental Restoration Program, or DERP, began in 1984, we have spent about $6.5 billion. However, we cleaned up only 416 sites and performed a lot of studies. We need to do better. Too much of our effort is devoted to what I call the "paralysis by analysis," problem. We still devote over 59% of our DERA funds to studies and evaluations.

There is no question that we simply have to change the way we do business if we are to achieve *real results.* Let me explain what I mean by real results . Real results come not just in the number of sites cleaned up but in the reduction in risk to public health and the environment. Real results will come as we:

- Focus on identifying and performing interim measures to reduce risk at environmental "hot spots;"
- Use existing and emerging technology to solve routine problems;
- Structure an environmental research and development program to target our most pressing needs;
- Put more senior management attention on contracting techniques, project management approaches, and regulatory impediments to test, measure, refine, and apply successes to the cleanup program; and
- Find more cost effective ways to meet our cleanup objectives.

The only way we can achieve real results is if we change the way we involve our major stakeholders—you, the Congress, the regulators (both federal and state), industry, and the public in the decision making process. The ultimate determinant of our success will be how effectively we can form new environmental partnerships with these vital constituencies.

To get beyond the "paralysis by analysis" problem we are devising strategies that:

- require DoD to complete its studies by certain specific dates,
- use interim remedial actions to address environmental "hot spots," and
- factor future land use plans into cleanup standards.

Interim remedial actions are expected to more than double in FY 1994. The significance of this doubling is a growing realization among regulators and installation cleanup program managers that health risks to workers and exposed populations must be reduced while longer term solutions are being developed. Promptly performing Interim Remedial Actions (IRAs) will quickly and substantially reduce the risk to public health and the environment. Our recent initiative to begin tracking IRAs will allow a more thorough evaluation of actual cleanup progress.

V. DOD FAST-TRACK CLEANUP AT BASE CLOSURES

Overall, the cleanup program has proceeded at a very slow pace. The average for all DoD installations takes about 8 years to clean up and complex sites can easily take over 10 years. This pace is unacceptable to all involved in the process and especially to those at the local level. Our objective is to speed up this process.

The Department of Defense has begun a new approach to cleanup. An approach initiated by the President's July 2 message to speed the economic recovery of communities where military bases are slated to close. The President's five-part program is a sharp departure from the past. Rapid redevelopment and creation of new jobs in base closure communities are the top goals of the new initiative. Fast-track cleanup is an important part of this initiative and involves the following by key elements:

- *Establishing Cleanup Teams.*—Cleanup Teams will be established for all closing and realigning installations where property will be made available to the local community. These teams will be made up of DoD, EPA, and state representatives and will be given decision making authority consistent with existing statutes to expedite the cleanup process. They will conduct a "bottom-up" review of all cleanup plans and schedules and will produce an accelerated cleanup plan for the installation.

- *Speeding up the NEPA Process.*—In the past, DoD prepared one environmental impact statement for disposal, after an installation was announced for closure, and another, several years later, when the community's reuse plan was submitted. DoD will prepare a single NEPA document for the new use of the property and will commit to completing documents required by NEPA within 12 months from the date a community submits its final reuse plan. In addition, DoD will assist the community in preparing their reuse plan.
- *Involving the Public.*—DoD will establish Restoration Advisory Boards at closing and realigning installations where property will be made available to the local community. These boards will involve the local community in the cleanup process, make information on cleanup program activities available in a timely manner, encourage public comment, and work closely with the Cleanup Team. These boards will be made up of representatives from DoD, EPA, the state, and diverse interests within the local community.
- *Making Propery Available.*—DoD will develop and issue policies and guidance to facilitate the speedy return of properties to the local community. Among these are (1) policies implementing the Community Environmental Response Facilitation Act (CERFA) which requires the identification of "uncontaminated" properties with regulatory agency concurrence, (2) policies on making a "Finding of Suitability to Lease" for uncontaminated or contaminated properties that can be leased for reuse consistent with protection of human health or the environment, and (3) policies on making a "Finding of Suitability to Transfer" for uncontaminated properties or contaminated properties that have been cleaned up.

The cleanup of closing bases is the most visible part of DoD's environmental restoration effort. How well the Department returns property to productive civilian use will be an important measure of performance—performance on how well the Department of Defense can work with state and federal regulators, the Congress, and the public. To achieve the Secretary's goal to return closing installations as quickly as possible, we must come together as a team.

VI. OTHER CLEANUP CHALLENGES AND NEW DOD APPROACHES

Other challenges to our cleanup program are also complex and far reaching, and, as the following examples will show, not unique to DoD.

COST ESTIMATION

While we do have cost estimates for our site cleanups the accuracy of our estimates, especially in the outyears, is low. At the time of our estimate, many uncertainties prevailed such as total number of sites, future land use, and level of cleanup. We lack a Department-wide methodology for accurate, uniform cost estimation and projection. We have created a Task Force on Environmental Security Funding to recommend ways to improve requirements determination and to build an integrated Planning, Programming, Budgeting System (PPBS) for our cleanup activities.

CONTRACTING

In the past contracts were separately awarded for each phase of the program. For example, one contract for preliminary assessment and site inspection (PA/SI), one for remedial investigation and feasibility study (RI/FS), one for remedial design (RD), and finally one for remedial action (RA). This series of "hand-offs" presented obvious problems in terms of time, money and redundant effort. There are time delays between contracts due to the recompetition process and problems with redundant effort when a new contractor won't accept past work of a previous contractor. We are now meeting this challenge by using "modified turnkey" contracts which provide for one contractor to do all work from PA to RD. We have also developed and are about to award the first of what we call our "total environmental response contracts" cr TERCs which would permit one contractor to do a full turnkey operation, that is, from preliminary assessment to remedial action. We also have our "full service" contracts by which one contractor can supply a complete range of technologies to fulfill our cleanup requirements at a number of different sites. This is being tested at in our pilot expedited cleanup program and is, likewise, proving successful. While cost savings are expected, time savings, using these innovative contracting approaches, is expected to be the biggest payback.

INCREASING COSTS

Cleanup costs have risen significantly over the years from $150 million in FY 1984 to over $1.2 billion being appropriated in FY 1993. While there are many satisfactory reasons for this increase such as more legally mandated requirements, more potential sites identified higher cleanup standards, more federal and state regulations, and more sophisticated technology required for the job, we must do all we can to curtail costs. We believe several things can be done to more efficiently invest our resources, for example:

- considering planned or proposed land use as cleanup standards are developed;
- more efficient competitive contracting;
- stabilizing "hot spots" immediately using cost effective technology for cleanup remedies;
- streamlining site characterization and remedy selection wherever possible;
- continuous process improvement and search for cost reduction methodologies such as benchmarking and standardization; and
- avoiding costs through an active, effective pollution prevention program.

PUBLIC INVOLVEMENT

Failure to involve the public in environmental decisions can quickly lead to an erosion of public trust resulting in legal actions, Congressional and regulatory pressures, and a general slowdown in the progress of our cleanup effort. These impacts can be significant.

If we don't respond rapidly and responsibly to the cleanup of our contaminated sites it won't take long for a general erosion of public trust to transcend. Like risk, this can have a devastating effect on our cleanup program and other programs within the DoD. Most significantly, a lack of trust in our cleanup efforts can drive up the cost of the program due to delay and increased pressure to act conservatively. Also, distrust can "spill over" into other DoD programs such as the procurement function or our training mission causing similar slow downs and curtailments.

To confront this problem, over the past 18 months DoD has participated in discussions with other Federal agencies, tribal and state governments and associations, and environmental and citizen organizations on improving decision making in the cleanup program. The group developed recommendations for agencies on sharing information, increasing public involvement and consulting with stakeholders on setting cleanup priorities. In response to recommendations, we are working with the Services to develop implementation strategies for recommendations developed by the Federal Facilities Environmental Restoration Dialogue Committee (Keystone). These strategies include:

- giving the public more information faster;
- revising community relations plans where needed;
- active public involvement in the decision making process;
- establishing Restoration Advisory Boards (RAB) at our NPL sites for more quality public involvement; and
- promoting the RAB concept at our non-NPL bases.

In addition, we are also working hard on developing and articulating new measures of merit, promoting our success stories, and participating in public forum, dialogues, conferences and symposia. We are also working on developing a common sense risk management program to help better define and manage risk.

EDUCATION AND TRAINING

We need to improve the technical knowledge of our DoD employees whose tough challenge it is to deal with the very complex, dynamic environmental regulations on a daily basis. We are beginning to develop an integrated training plan to meet that challenge.

However, our training plan will extend beyond the environmental community to reach the operators, the maintainers, and the purchasers. We will build on the strength within each of the Services and use the capabilities in the academic community to ensure that we train our workforce efficiently to a uniform standard of quality.

VI. SUMMARY

In closing, I want to emphasize the Department's commitment to environmental cleanup using a common sense approach to achieve real results. We believe that with our common sense approach and our "fast-track" cleanup we are embarking on a smarter way of doing business by focusing on:

- partnering with regulators and other Federal agencies;
- improving communication with the public and encouraging active participation in the decision making process;
- factoring planned land use as cleanup standards are developed;

- reducing risk;
- structuring our environmental research and development program to target our most pressing needs;
- continuous management and process improvement; and
- cost reduction.

We look forward to working with you and our colleagues to create a new environmental partnership for a common sense cleanup.

This concludes my remarks. I would be pleased to respond to any questions that you or other members may have.

PREPARED STATEMENT OF MICHAEL HEYMAN

The Department of the Interior (DOI) appreciates this opportunity to present its views regarding the Federal government's liability with respect to hazardous and radioactive waste contamination at federal facilities. I am Mike Heyman, Deputy Assistant Secretary for Policy, Management and Budget. With me today is Jonathan Deason, Director of the Office of Environmental Affairs (OEA). OEA oversees the DOI's compliance with environmental statutes, coordinates environmental matters that affect multiple bureaus in the Department, and provides independent environmental and technical advice to the Secretary and to the Assistant Secretary, Policy, Management and Budget.

SNAPSOT OF INTERIOR

The DOI consists of nine bureaus (Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), Bureau of Mines (BOM), Bureau of Reclamation (BOR), Fish and Wildlife Service (FWS), U.S. Geological Survey (USGS), Minerals Management Service (MMS), Office of Surface Mining (OSM), and National Park Service (NPS)) and a tenth, the National Biological Survey (NBS) was announced by the President in his Earth Day address and is currently being established. Four of these bureaus, BLM, BOR, FWS, NPS, manage over 440 million acres of land, located predominantly in the western United States. These lands include parks, historic sites, monuments, recreation areas, wildlife refuges, wilderness areas, and public lands. The DOI also is a trustee for over 50 million acres of Indian lands and has responsibilities in United States-related insular areas (carried out principally by the Assistant Secretary for Territorial and International Affairs).

Certain lands managed by Interior are available to the general public under various statutory authorities for a variety of uses including mining, oil and gas production, rights-of-way, landfills, livestock grazing, recreation, and industrial and commercial activities. The DOI, through the BLM, manages 300 million acres of subsurface mineral resources nationwide, including 39 million acres in the eastern United States. The DOI also manages the oil and gas and other mineral resources on the outer continental shelf. In addition, the Department operates research laboratories and experiment stations throughout the United States.

DOI, like any Federal agency, has potential liability for the cleanup of hazardous wastes sites under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, the Resource Conservation and Recovery Act (RCRA), and EPA-authorized state hazardous waste programs. DOI is subject to liability for "federal facilities" under its management or for sites where it is identified as a potentially responsible party.

SCOPE OF THE CLEANUP CHALLENGE AT INTERIOR

The cleanup challenge faced by Interior is more highly varied than that faced by any other Federal agency. To give you a sense of the magnitude and variety of that challenge, it has been estimated that there exist currently on lands managed by the Department approximately 300,000 inactive and abandoned mining sites, 200,000 active and inactive oil and gas leases, 300 active and 3,000 inactive landfills, 4,200 underground storage tanks, and numerous sites containing unexploded ordinance, former defense-related activities, illegal dumps, illegal drug labs, and other activities potentially needing remedial attention.

In addition to liabilities under CERCLA and RCRA, the Department also faces liabilities from hazards to the public and employees that may exist on its lands and facilities. For example, the NPS has estimated that it has approximately 1,500 inactive or abandoned mines and 9,000 mine openings or hazards on its lands. A number of visitors and employees have been injured and six have been killed in accidents involving these hazards since the late 1970s. NPS has been working to identify, correct and prevent these hazards and to educate employees and the public about potential problems. The Department's liability for this type of hazard to visitors is determined, to a large extent, by tort claims law, and while difficult to estimate, is probably very large.

Liability for employee workplace injuries is determined by the Federal Employees Compensation Act (FECA), and for DOI, the cost of FECA claims runs in excess of $40 million per year. Only a very small portion of these claims can be attributed to hazardous waste site operations. Program responsibility in this area, as well as for safety and health support to hazardous waste site operations, is provided by the individual bureaus under the policy guidance of DOI's Office of Safety and Occupational Health. Oversight of bureau safety and health program elements is provided during Safety Management Evaluations.

In order to facilitate understanding of the hazardous waste cleanup challenge faced by the Interior Department, it is useful to group sites for which the Department may be liable into four categories: 1) sites on the Environmental Protection Agency's (EPA) Federal Agency Hazardous Waste Compliance Docket; 2) sites related to DOI activities or land ownership; 3) sites specifically related to mining or mineral activities; and, 4) sites on Indian lands. These categories are for illustrative purposes and overlap in many areas. I would like to address each of these categories individually.

1) Sites on EPA's Federal Agency Hazardous Waste Compliance Docket

According to EPA, DOI has jurisdiction over 432 sites and facilities on the Federal Agency Hazardous Waste Compliance Docket (Docket). A breakdown of these Docket sites by bureau as listed on EPA's Docket is provided in the following table.

Interior Sites by Bureau on the EPA Federal Agency Hazardous Waste Compliance Docket—Update Number 7 (February 5, 1993)

Bureau	*Number of Sites*
Bureau of Indian Affairs	10
Bureau of Land Management	314
Bureau of Mines	5
Bureau of Reclamation	25
Fish and Wildlife Service	31
Geological Survey	2
National Park Service	35
Bureau Unknown	10
	432

The status of each of these sites within the evaluation and remedial process is indicated in the following table.

DOI Preliminary Assessments (PA's), Site Investigations (SI's),
Remedial Investigations/Feasibility Studies (RI/FS's), and
Remedial Designs/Remedial Actions (RD/RA's)
as of February 1, 1993

Bureaus		PA's	SI's	RI/FS's	RD/RA's
BOR	Completed	13	7	4	5
25	Ongoing	11	10	5	3
FWS	Completed	27	21	2	
31	Ongoing	2	6	2	1
BLM	Completed	285	73	2	
314	Ongoing	13	11	3	
BIA	Completed	10	1	2	2
10	Ongoing				
BOM	Completed	4	1		
5	Ongoing				
USGS	Completed		1		
2	Ongoing				
NPS	Completed	15	4		
35	Ongoing	5	10		
DOI Totals	Completed	354	108	10	7
432*	Ongoing	31	37	10	4
*Includes 10 "bureau unknown" sites.	No evaluation commenced	47	N/A	N/A	N/A

N/A - Not Applicable.

Although DOI and its bureaus are involved as a Potentially Responsible Party (PRP) in the cleanup of numerous National Priorities List (NPL) sites, according to EPA, only two sites on the NPL are listed as being DOI sites: Lee Acres Landfill in Farmington, New Mexico (BLM) and Crab Orchard National Wildlife Refuge in Marion, Illinois (FWS).

2) Sites Related to DOI Activities or Land Ownership

The second category includes at least four types of sites: a) Sites where DOI has been identified by EPA or others as a PRP on the basis of past bureau activities (e.g., Robinson Brick Company site in Denver); b) Sites where DOI has been identified as a PRP on the basis of legally disposing of solid or hazardous waste at the site (e.g., Lowry Landfill near Denver); c) Sites where DOT has been alleged as a PRP solely on the basis of land ownership (e.g., NPS at Krecji Dump in Ohio); and, d) Sites where land acquisition was required by Congress. This last group includes transfers under specific Congressional actions (e.g., Steamtown in Pennsylvania and Crab Orchard National Wildlife Refuge in Illinois) or sites under the Base Realignment and Closure (BRAC) acts (e.g., the Presidio of San Francisco). Many of these sites have required DOI action for cleanup or evaluation and have already required significant funding.

3) Sites Specifically Related to Mining or Mineral Activities

This category consists of sites where the conduct of government business related to mining or minerals activities has led to allegations by private parties that DOI bureaus are PRP's. This category includes three types of sites: a) Those where there are allegations of liability based on past or present Federal ownership of land where mining claims exist (e.g., Clark Fork NPL site in Montana). Mining sites will be discussed in more detail later. b) Sites where DOI had past involvement with government mineral exploration assistance programs (e.g., Defense Minerals Exploration Agency (DMEA) activities such as those at Blackbird Mine in Idaho, and California Gulch and Smuggler Mountain in Colorado) or where a DOI bureau became the successor of another government agency. For example, there are at least 1,342 mines related to the Strategic Minerals Development Program (operated from 1939 through 1949) which could result in allegations of DOI liability should those sites require remediation. c) Sites where DOI conducted minerals-related research and sampling activities under Congressional mandate (e.g., various BOM and USGS drilling and sampling programs). The number of sites in this category currently is unknown, but is potentially large, given the nature of the missions undertaken by the BOM and the USGS in the past.

4) Sites on Indian Lands

The fourth category of sites involves those located on Indian tribal or allotted lands. There are many issues regarding the Federal government's trust responsibilities for cleanup of these sites.

The DOI and/or the BIA are often thought to bear the responsibility for inventory, assessment and remediation of hazardous waste sites on Indian lands. However, the degree of Federal government responsibility for the remediation of sites on Indian lands is very unclear. One view of this issue was set forth in a Report to Congress on "Hazardous Waste Sites on Indian Trust Lands" submitted in June 1988 by BIA to the U.S. House of Representatives, Appropriations Committee, Subcommittee on Interior and Related Agencies. That report indicated that the responsibility for management or cleanup of hazardous waste sites on Indian lands belongs to the Tribe or individual Indian owner, because Indian lands are under the jurisdiction of Tribes or individual Indians and not under Federal ownership,

There are many types of sites on Indian lands (e.g., mines, landfills, and illegal dumps). Potential cleanup costs vary from small amounts up to $100 million for a single mine site. The health risks to the public and risk to the environment from these sites is highly variable. Many Indian sites are not under DOI management, but there may be some level of responsibility on the part of the Federal government to remediate these sites. This trust responsibility has not been specifically outlined by the Federal courts for CERCLA-type situations.

In a 1991 operating Memorandum of Understanding (MOU) signed jointly by the BIA, the EPA, the Department of Housing and Urban Development, and the Indian Health Service, the agencies' functional responsibilities under CERCLA are set out for sites on Indian lands. BIA made a commitment to "facilitate" non-NPL cleanups. The BIA recognizes its responsibility to inventory and remediate hazardous waste sites on lands and facilities owned and/or operated by the BIA. When BIA is found to be a PRP at a contaminated tribally-owned and operated site, it will assist in the cleanup along with other PRP's.

To date, some hazardous waste removal actions on Indian lands have been conducted by EPA in accordance with the MOU. Other mechanisms for cleanup of mine sites contaminated by hazardous substances on Navajo lands have been developed on a case-by-case basis (e.g., abandoned mine lands (AML) funds have been used for the cleanup of the King Tut Mesa mines).

No standard approach for the cleanup of sites on Indian lands has been developed to date. Any discussion of hazardous waste on Indian lands should recognize the distinction between the DOI's responsibilities and should be treated separately and not as part of a discussion of activities on DOI lands.

UNCERTAINTIES SURROUNDING FUTURE LIABILITIES FOR CLEANUP

Generally speaking, the level of uncertainty regarding potential liability of the Federal government increases from the first category discussed above (Docket sites) to the fourth category (Indian sites). Even for the least uncertain category (Docket sites), total future liability cannot be assessed accurately at the present time. This is true for at least three reasons: (1) Since comprehensive inventories of all DOI lands have not been completed, the list of DOI Docket sites clearly is not complete. (2) For those sites that have been listed, not all site evaluations have been conducted. (3) For those sites where evaluations have been conducted, DOI disputes its levels of responsibility in some cases. In addition, for categories of sites other than the Docket sites, substantial unresolved legal issues are also the source of a great amount of uncertainty.

I would like to address briefly the two most important of these four sources of uncertainty: lack of a complete inventory and unresolved legal issues.

INVENTORIES

DOI bureaus have been conducting inventories to determine what risks have developed from activities on DOI-managed lands and facilities. This inventory represents an enormous workload given over 440 million acres of land managed by DOI. Much of this land is located in remote and inaccessible areas.

In response to the need for a consistent inventory strategy throughout the Department, the OEA and the bureaus are in the process of forming a work group to identify inventory methods and tools available to DOI bureaus. Among the methods being considered is the use of satellite imagery and other remote sensing techniques to assist in site discovery and validation. As a part of that effort, the DOI will be conducting reviews of inventories already existing throughout the Department in various forms, including automated systems, to identify sites for field validation and data quality assurance and quality control. This group will also look at determining what criteria, such as proximity to population centers or sensitive environments, should be used to focus the inventory efforts. The work group will be developing recommendations on the appropriateness of various inventory methods and tools for identification and screening of various types of sites. In addition, the bureaus will be conducting a CERCLA Federal Facilities Departmental Functional Review, pursuant to the Federal Managers' Financial Integrity Act, which will assess the programmatic compliance with CERCLA Sections 103(a) and 120(b) dealing with notification and inventory requirements.

These inventories will involve the waste management programs within DOI, as well as several other program areas. For example, the several of the Department's bureaus are currently working to develop strategies to inventory abandoned mines on lands under their jurisdiction. For example, BLM has established a task force for the purpose of improving the inventory process and developing an inventory methodology. This strategy involves, among other things, a review of existing inventories conducted by state governments and other organizations to prevent unnecessary duplication of effort.

In addition to the facts that the Docket does not list all DOI sites, that DOI disputes its responsibility for some of the sites on the Docket, and that sites currently on the Docket do not yet have completed site evaluations, unresolved legal issues also have a direct bearing on the extent of DOI liability. Liability is being clarified in some cases of allegations based on DOI activities or land ownership, but is still mostly undefined. Most allegations of liability for sites specifically related to mining or mineral activities have not been defined, but may be enormous (e.g., at the Clark Fork NPL site in Montana and the government mineral exploration assistance program sites).

UNRESOLVED LEGAL ISSUES

The Department is exploring with the Department of Justice the extent of, and the legal basis for, any liability that may arise from these issues, as well as legal defenses to alleged CERCLA liability. In those cases where DOD is involved, DOI liability may be reduced since such sites may be cleaned up under Base Realignment and Closure initiatives or as Formerly Utilized Defense Sites under the Defense Environmental Restoration Program.

Uncertainties regarding the degree of contingent liabilities make it difficult to determine the true scope of budgetary needs of DOI for cleanup of sites. If certain judicial precedents are set (e.g. Clark Fork) for sites related to mining or mineral activities, the required funding could increase dramatically. Congressional action clarifying the interaction of the 1872 Mining Law and CERCLA, DOI's responsibilities for Congressionally-mandated actions (e.g. BOM sampling and USGS involvement in DMEA site administration), and the responsibility for remediation of sites on Indian lands could also have a substantial impact on DOI's budget.

Despite the current uncertainty regarding the magnitude of the Department's liability, it is clear the Federal government will be responsible for the cleanup of many of these sites.

INTERIOR'S WASTE MANAGEMENT PROGRAM

Before I address Interior's response to the challenges just described, I would like to briefly summarize the overall hazardous materials management program at Interior. Obviously, if DOI spent all its efforts on just cleaning up sites without attempting to prevent pollution or reduce waste in conducting our activities, we would never reach the desired endpoint of no or minimal numbers of sites. Instead, the path that we have taken involves an integrated approach to waste management that includes prevention, reduction and managing of wastes as well as cleanup and restoration of DOI sites.

The four major areas of emphasis in DOI's waste management program—pollution prevention, waste reduction, management of waste, and cleanup and restoration of polluted sites—provide DOI with a framework for the continued development of its programs. I would like to describe each of these areas briefly and provide a couple of examples of the types of activities currently underway in each area.

1) Pollution Prevention

Pollution prevention is the use of materials, processes, or practices that reduce or eliminate the quantity and/or toxicity of waste at the source of generation. One important example of actions underway in this area which will reduce our future remediation liability is the recent establishment of a strict land acquisition policy.

The Department's land acquisition policy (Secretarial Order 3127 and Land Acquisition Guidance, 602 DM 2.1) institutes a review process to control Departmental liability resulting from the acquisition of contaminated sites. Our Hazardous Materials Management Division (HMMD) in the Office of Environmental Affairs is currently preparing a land acquisition handbook to augment that policy.

As a second example, the HMMD began development in 1992 of DOI pollution prevention fact sheets that provide waste reduction guidance on work processes and activities that are commonly and/or uniquely associated with DOI and its bureaus. The current fact sheets cover 20 topics, such as wood and metal working, maintenance-related degreasing operations, composting, chemical labs, photo processing, and micrographics.

2) Waste Reduction

The second focus area of the waste management program actively seeks out where waste can be reduced and/or recycled. If waste can be effectively reduced at this stage, the potential for future releases and pollution is decreased.

DOI began its waste recycling and minimization program in 1990. The table below illustrates the volume of material recycled at the DOI building complex and by DOI bureaus as a part of that program between January 1991 and January 1992.

Interior Complex Recycling Program Quantities—January 1991-January 1992

Recycled Materials	*Amounts*
High grade white paper	1,444 tons
Colored paper	512 tons
Newsprint	191 tons
Aluminum	149 tons
Glass	169 tons
Plastic	31 tons
Corrugated cardboard	194 tons
Waste oil	71,143 gallons
Solvents	10,399 gallons and 0.5 tons
Lead acid batteries	2,870 batteries
Tires (recycled/recapped)	5,544 tires
Other metals	354 tons
Wood/lumber	1,198 tons
Compost	1,149 tons and 15 cubic yards
Other:	
Mixed paper	36 tons
Freon	50 pounds
Phone directory	2 tons
Toner cartridges	74 cartridges
Concrete	20 tons
Chemicals	0.5 tons
Silver Photoaphic recovery	10,440 gallons

3) Waste Management

In the program's third area, DOI is working to manage its waste responsibly in order to protect not only the natural resources entrusted to it, but the many people who live and work on DOI lands, and the millions more who enjoy DOI lands and facilities each year.

DOI has determined that the management of hazardous waste and materials is a material weakness for Interior under the Federal Managers Financial Integrity Act. To respond to this program weakness, OEA has developed Departmental Function Reviews for underground storage tanks (UST) and storage and disposal of generated hazardous waste (RCRA–TSD). These review programs are being used by our bureaus to identify and correct material weaknesses in meeting underground storage tank compliance requirements and deadlines, and to insure that DOI generated hazardous waste is tracked and disposed of properly.

We have several activities underway to help ensure that employees who handle, store, and dispose of generated hazardous wastes are familiar with relevant RCRA requirements. These activities include production of a training video and a hazardous materials compliance handbook for managers.

4) Site Cleanup and Restoration

This fourth area of the waste management program, of course, is the most relevant to the subject of this hearing. For that reason, I will address it in considerably more depth than the previous three focus areas of our waste management program. As I will explain, the Department is working aggressively to cleanup and restore areas under its care that are contaminated.

INTERIOR'S RESPONSE TO HAZARDOUS WASTE CHALLENGES

One key indicator of emphasis on any program area, of course, is the degree to which budgetary resources have been dedicated to it. I am pleased to report that the Department's hazardous waste cleanup program is among the greatest areas of growth within the Department in terms of budget.

BUDGET TRENDS

Listed below are the requested and appropriated amounts for the oversight, investigation, and cleanup of hazardous waste on DOI lands from 1989 to 1993. As you can see, the FY 1993 budget of $63.7 million is nearly double the FY 1989 budget of $34.9 million.

DOI HAZARDOUS WASTE FUNDING REQUESTS IN PRESIDENT'S BUDGET AND CONGRESSIONAL APPROPRIATIONS

Fiscal year	Requested budget (millions of $)	Enacted budget (millions of $)
1989	22.6	34.9
1990	38.3	34.1
1991	67.9	59.0
1992	80.2	70.4
1993	79.6	[1] 63.7
1994	71.95	

[1] The FY 93 decrease between requested and enacted budgets is primarily as a result of DOI removing its request for funding of work at on the Metals Operable Unit at Crab Orchard National Wildlife Refuge which is not ready to be commenced.

The need for these increases has been primarily as a result of more sites having been identified and sites moving through NCP process from assessment to remedial stages. Most sites needing cleanup, however, are still in the evaluation and planning stages.

The hazardous waste budgets of specific bureaus for FY 1992 and FY 1993 follow.

HAZARDOUS WASTE FUNDING

(In million of dollars)

Bureau	Allocated 1992	Enacted 1993	Change
Bureau of Land Management	20.5	22.5	+2.0
Fish and Wildlife Service	24.1	[1] 8.9	−15.2
National Park Service	10.5	12.9	+2.4
Bureau of Indian Affairs	2.2	3.5	+1.3
Bureau of Reclamation [2]	12.2	14.9	+2.7
Office of the Secretary	0.9	0.9	0.0
Total	70.4	63.7	−6.7

[1] The figure for FY 93 reflects a reduction in funds requested for cleanup activities at Crab Orchard National Wildlife Refuge in Illinois. The FWS notified Congress that the $11 million requested in the FY 93 President's Budget will not be needed until FY 94.

[2] Includes DOI's Irrigation Drainage program.

Although the hazardous waste funding levels depicted in these two tables have been steadily increasing, they do not represent the Department's total expenditures on hazardous waste management activities. These tables reflect funding for the previous Administration's "Legacy '99 HAZMAT" initiative. This budget crosscut primarily tracked spending on major cleanup projects and related activities. Consequently, it did not include funding for environmental technology research or bureaus' funding for internal waste control and disposal. In addition, funding for the cleanup of the Krejci Dump Site was categorized under the "Legacy '99 Construction" program rather than the "Legacy '99 HAZMAT" program.

TRACKING SYSTEM

In addition to directing substantially increased budgetary resources into its cleanup program, the Department has undertaken a number of recent initiatives to address its cleanup problems. In September 1991, DOI signed an interagency agreement with the U.S. Army Corps of Engineers, Construction Engineering Research Laboratory (CERL) to modify the U.S. Army's DB1383 database system for use by DOI. By collaborating on this project, DOI is getting a system that cost the Army approximately $7.5 million for approximately $200,000. The DOI's database system, called the Pollution Abatement Reporting and Information System (PARIS), will automate the DOI's preparation of the pollution abatement report required by OMB Circular A–106 and Executive Order 12088.

The PARIS will provide the bureaus' field and regional offices and the Department with the ability to track fiscal and budgetary information related to all hazardous materials cleanup sites and other pollution abatement projects in a consistent manner and to prepare the OMB Circular A–106 Report to EPA. The PARIS system will also be used in the future to prepare other reports for the Congress, EPA, and OMB.

The DOI and CERL have also agreed to a program of enhancements and improvements to PARIS to be completed over the course of FY 1993. Among these was the conversion of the Database of U.S. Army Europe Contaminated Sites (DUCS) for use as a module of the PARIS system. The Contaminated Sites Information System (ConSIS) will allow DOI bureau field offices to track levels of various contaminants in surface water, groundwater, and soil at each site. The system is compatible with the data in the PARIS system to allow for transfer of site identification information without reentry of data. The ConSIS also will allow the DOI to track claims for cleanup contributions associated with contaminated sites, including situations where the claims are against the DOI or a third party. The ConSIS will also include the capability to store graphic images of a site or other pertinent information as a part of the site's data files.

PRIORITIZATION SYSTEM

In order to ensure that funds are being allocated in the most efficient and effective manner, DOI has developed a hazardous materials site prioritization system, which is currently being implemented for a one-year pilot program. The system involves a two-tiered process to accomplish this. First, this system establishes broad categories of sites. Secondly, within each category, this system sets forth priorities in order to rank sites within them.

The DOI prioritization system is to be used to evaluate and rank hazardous materials sites where the DOI is responsible for the cleanup of the site. This includes sites on DOI-managed lands and facilities and other sites at which DOI has been named a potentially responsible party. Sites on Indian trust lands are not generally included, unless the DOI is responsible for the site cleanup.

The use of this prioritization system is not an attempt to conduct risk assessments on the DOI sites. Much as in EPA's Hazard Ranking System, the factors considered in the DOI prioritization system are used only to evaluate the characteristics of each site as a part of the overall decision-making process for determining the most efficient use of appropriated funds for site evaluation and cleanup.

Sites involving past or present releases of a hazardous substance, or a threat of a release of a hazardous substance, which may present an imminent and substantial danger to the public health, welfare, or the environment will be promptly addressed. Such sites, by their very nature, are not items for routine planning or budgeting. For these reasons, sites which pose imminent and substantial danger are not subject to ranking by this system, but our policy requires the DOI to respond in a timely manner to any imminent and substantial danger. As an example of this policy in action, when BLM's PA at the Lee Acres Landfill indicated that there was a strong potential for contamination of wells in a nearby community, an alternative water supply was quickly provided to all users of well water in the community.

After the imminent and substantial danger has been abated, and for sites where no such danger exists, it is necessary for the DOI to set priorities regarding allocation of funding for the remediation, removal action, and/or restoration at these sites. At a number of sites, statutory requirements, regulatory provisions, judicial orders or administrative orders provide timeframes and deadlines for completion of various specific actions. Many of these requirements address the completion of site evaluation processes necessary to determine the optimal cleanup actions. Our prioritization system acknowledges the inherent priorities given to activities required by these authorities, based solely upon the dates required for completion of the actions. Additional prioritization of the required actions is necessary to address situations where funding appropriated by Congress is inadequate to complete the required actions.

COST ESTIMATING SYSTEM

The Remedial Action Cost Engineering and Requirements (RACER) system was developed by the U.S. Air Force as an engineering cost estimating and remedial action evaluation system for the Air Force Installation Remediation Program. The cost estimating functions are based on engineering models which have been customized for environmental cleanups and verified on over 100 field sites. The DOI has contracted with the Air Force to modify the system for DOI use in selecting cleanup approach and estimating the costs of cleanup. The system will be used by DOI bureaus for budgeting, contracting and contract administration and oversight. Again, through interagency collaboration, DOI is obtaining a complex automated system at a modest cost.

REPORTING SYSTEMS

The Department prepares a wide variety of annual or biennial pollution abatement tracking reports such as the OMB Circular A–106 report, the Resource Conservation and Recovery Act 3016 waste generator report, and the Comprehensive Environmental Response, Compensation and Liability Act 120(e) report to Congress.

Currently, the DOI prepares its A–106 submission solely as a reporting requirement for OMB. However, DOI does consider the A–106 in its present form to be a useful planning tool for identifying, tracking, and reporting pollution abatement projects to meet environmental requirements or correct compliance plans. For that reason, the DOI contracted for the PARIS to provide a standardized format for reporting and tracking pollution abatement project funding and progress.

In addition, DOI has been actively participating in the interagency workgroup established by OMB and EPA to revise the A–106 process. DOI is optimistic that the A–106 process can be appropriately revised by this group of agencies representing both end users and generators of the data. DOI is also hopeful that this interagency work group can develop consistent data definitions which allow for legitimate agency discretion in management of their unique programs.

OTHER INITIATIVES

In 1992, DOI undertook preparation of a handbook that will provide DOI bureaus with information on how to conduct PRP searches in order to seek PRP-lead cleanups, compensation and/or settlement for the remediation of the sites. This is intended to bolster our policy of making the polluters pay for the cost of remediation and restoration of sites under its jurisdiction.

Let me provide a few examples of this policy in action. Currently, the Department is negotiating with two private responsible parties to cleanup portions of Crab Orchard National Wildlife Refuge in Illinois. Thus far, an agreement has been reached with one company for site cleanup and FWS and the Department of the Army have contracted to search for other potentially responsible parties. In another case, NPS is pursuing cost recovery actions with the assistance of the Justice Department for Krejci Dump Site, in the Cuyahoga Valley National Recreation Area in Ohio. A third example is the Malaspina Drilling Mud Site at Wrangell-St. Elias National Park and Preserve in Alaska, which was cleaned up by the private responsible party for an approximate cost of $2 million.

In the area of risk assessment, we recently signed an MOU with the Agency for Toxic Substances and Disease Registry (ATSDR) for public health assessments and environmental health-related activities on selected DOI sites.

In September 1992, the Department hosted the first Department-wide hazardous materials workshop to scope out emerging issues and policy needs. As a followup to that workshop, DOI sponsored a Department-wide HAZMAT Conference in May 1993. In addition to the Conference being a training and program interaction opportunity for DOI and bureau personnel who deal with hazardous materials, it also afforded the opportunity for DOI bureaus to showcase their capabilities for assisting other DOI bureaus with hazardous waste and materials management and cleanup actions. This interaction is designed to enhance the use of existing DOI capabilities in a cost-effective manner.

To further strengthen the Department's commitment to sound waste management, the Hazardous Materials Management Division was formed in 1991 within the Office of Environmental Affairs to increase oversight of bureau waste actions, to develop Departmental policy for hazardous materials management issues and to facilitate the development of uniform programs throughout the Department. The creation of this division provides the bureaus with a focal point for program coordination and the development of major Departmental management systems.

The Hazardous Materials Management Advisory Group was formed in 1991 to oversee a comprehensive Interior Department approach to waste management and to set policy, oversee, coordinate, and review all aspects of the Department's involvement with CERCLA and the RCRA on Interior lands and facilities. This group is composed of a Deputy Assistant Secretary from each of the six Assistant Secretariats and the Deputy Solicitor. The Advisory Group provides cross-cutting policy advice to the Secretary and policy guidance to DOI bureaus on hazardous waste matters.

DOI assures financial accountability of its contractors engaged in environmental cleanup through a number of policies implemented by DOI bureaus. For example, the BLM requires that the prime contractor for removal and remedial contracts have $1 million per incident or action pollution liability insurance. Additionally, transporters and treatment, storage and disposal facilities are required to have $5 million in pollution liability insurance. Finally, all invoices for services rendered are reviewed and validated by the project inspector and contracting officer's representative prior to payment, and reviewed, validated and approved for payment by the contracting officer.

INTERAGENCY RELATIONSHIPS

The Committee's letter inviting us to participate in this hearing asked us to cover in our testimony, in addition to the topics discussed above, the nature of our relationships with other Federal agencies as related to cleanup strategies. The Interior Department is engaged in a number of interagency efforts to achieve complementary long-term cleanup strategies that involve both regulatory and non-regulatory measures.

INTERACTIONS WITH EPA

DOI bureaus and offices have a number of MOU's with various offices within the EPA. For example, the BOM has negotiated MOU's with the Office of Solid Waste and Emergency Response (OSWER) and the Office of Research and Development (ORD) at EPA. Under the MOU with the OSWEP, the BOM has implemented twenty-two separate, site-specific interagency agreements, involving over $3.5 million, since 1987. As a result of the MOU with the ORD, the EPA and BOM have established four joint working groups to cooperate in areas of research relating to mining, hazardous, and other types of waste.

Another important area involves the new Federal Facilities Compliance Act. We are working with the EPA to clarify the areas of uncertainty regarding interpretations of various aspects of that Act and to insure that we comply fully with its provisions.

Recently, EPA has proposed to open discussions on .the creation of model language for interagency agreements involving the DOI. Although this is a very difficult task, given the varied nature of DOI's sites and the differences between DOI sites and those of other Federal agencies, we are working to make progress in this area.

In general, most of our interactions with EPA have been conducted on a case-by-case basis at each site or on an issue-by-issue basis. The effectiveness of interactions between DOI and EPA regional offices has varied from region to region and time to time. DOI must continue to work to inform EPA of its missions and programs and to learn from EPA in order to more efficiently implement the various environmental programs on DOI-managed lands and facilities.

INTERACTIONS WITH DOD

Because of the number of sites on DOI-managed lands that have been impacted by activities of DOD, DOI has been involved in resolving issues with the DOD on a number of occasions. The two agencies have generally been able to reach accommodation, although no formal mechanisms exist for ongoing dialogue or dispute resolution. Interactions have generally been on a site-by-site or issue-by-issue basis.

For example, Crab Orchard National Wildlife Refuge was acquired by the FWS after World War II, when the property was no longer needed by the Army as a munitions manufacturing facility. The legislation effecting the transfer continued its use as an industrial park. Former military uses and subsequent industrial activities are the sources of the contaminant problems placing the site on the NPL. We have worked extremely well with the Department of the Army to complete a Federal Facilities Agreement among the Department of the Army, DOI and EPA and the remedial action at that site is proceeding satisfactorily.

We also have been working well with the Department of the Army at such important sites as the Rocky Mountain Arsenal in Colorado, and the Presidio of San Francisco, California.

Although former DOD sites are located nationwide, Alaska provides the greatest number of examples because of the large number of transfers of lands under the Alaska Native Claims Settlement Act and its amendments. Throughout Alaska are numerous active and former military sites on DOI lands, including abandoned Japanese military bases in the Aleutian Islands. As an example of the complexity of these sites, on Amchitka Island alone, which is currently part of Alaska Maritime National Wildlife Refuge, the Department of Energy is working on the cleanup of contaminants related to an atomic bomb test, the Navy is cleaning up spills at an active high-security installation, and the Army Corps of Engineers is charged with cleaning up debris and contaminants at a major abandoned World War II base.

INTERACTIONS WITH OTHERS

We also have been active on the Federal Facilities Environmental Restoration Dialogue Committee (FFERDC), which consists of representatives of EPA, the Departments of Defense, Energy, Agriculture, Commerce, and Interior, NASA, various states and organizations of states, environmental groups, citizen groups, Native American organizations and tribes, and organized labor. The Office of Environmental Affairs represents DOI on the FFERDC.

The FFERDC is sponsored by EPA and has been meeting for nearly two years. The FFERDC has been developing recommendations regarding the administrative processes related to public involvement and funding allocation used by Federal agencies during the cleanup of contaminated sites. The EPA issued the interim final report of the FFERDC in April. The recommendations of the FFERDC are being implemented on an interim basis and the FFERDC will meet in July to discuss future steps.

The Department, in cooperation with EPA, DOD, DOE, and the Western Governors Association (WGA), signed an MOU to develop technical solutions to environmental restoration problems shared by the states and the Federal government. The MOU has resulted in formation of an advisory committee to develop on-site innovative technologies for environmental restoration and waste management. In addition, the Federal agencies convened a working group to address issues related to workforce planning. This working group prepared a report on the Federal perspective on employment, education, worker retraining, and retraining curricula as related to the cleanup of Federal facilities. The work group concluded that employment and retraining opportunities both in the Federal and private sectors will be created as Federal agencies focus on environmental restoration. Particular attention will be given to this issue during implementation of the MOU.

We also are involved extensively in a number of other collaborative efforts with the states, EPA, Indian tribes, and other Federal agencies. Examples of these efforts include the EPA–DOI–DOA Federal Workshop on RCRA issues, the EPA RCRA Mine Waste Policy Dialogue Committee, the Multi-agency Waste Taskforce on Indian Lands, the Government Recycling and Procurement Trade Fair and Showcase, the Federal Agencies Recycling and Procurement Task Group, the Federal Agencies Underground Storage Tank Group, the Federal Remediation Technologies Roundtable, and the Federal Facilities Environmental Restoration Committee.

CONCLUSION

That concludes my prepared statement. I will be pleased to answer any questions that you wish to ask.

U.S. Department of the Interior,
Office of the Secretary,
Washington, DC.

Senator John Glenn,
Chairman, Committee on Governmental Affairs,
U.S. Senate, Washington, DC.

Dear Mr. Chairman: At the hearing of your committee on September 21, 1993, I was requested to provide information in response to questions. I am pleased to transmit to you the attached reports in response to those questions.

In Enclosure 1, the Department's Office of Occupational Safety and Health has provided a detail analysis of the 757 worker illnesses and injuries cited in your committee's and the Inspector General's reports. You will note that, as I stated at the hearing, the majority of these incidents are not related to chemical exposures or exposures to hazardous materials, but are exposures to other noxious substances, such as poison ivy, poison oak, or insect bites.

The Bureau of Land Management (BLM) has provided a detailed report on their response to the recommendations made by the National Academy of Engineering in their report. (See Enclosure 2.) Please note that the BLM has made significant progress in addressing the recommendations made to them, with over 90 percent of the recommended actions either completed or in progress.

Finally, I would like to provide a detailed response to a question raised by Senator Levin concerning the number of Interior facilities on the Federal Agency Hazardous Waste Compliance Docket (Docket). In general, Federal facilities listed on the Docket contain one or more sites in need of investigation and, where applicable, remediation. Federal facilities are defined for the purposes of the Docket as encompassing all contiguous land owned by a Federal agency. Because of the vast contiguous acreages owned by the BLM, sites on BLM land do not conform well to this definition of facilities. As a result, the BLM requested, and EPA agreed, that BLM would count each site as a facility. Thus, the 314 sites listed as being BLM's responsibility on the Docket represent far fewer than 314 facilities. Senator Levin asked how many facilities are represented.

Subsequent to the hearing, the BLM investigated and found that its 314 sites would represent only 43 facilities if BLM administrative units were defined as facilities. When combined with the 118 facilities listed on the Docket for other bureau within the Department, the total number of DOI facilities represented by the 432 sites on the Docket is 161.

The Department appreciates this opportunity to provide you with this information. Should you have any questions, please do not hesitate to contact me at (202) 208–4123.

Sincerely,

I. Michael Heyman,
Counselor to the Secretary and
Deputy Assistant Secretary for Policy.

Enclosures

Enclosure 1

Response to the Senate Committee on Governmental Affairs
Analysis of the 757 Accidents Referenced in the IG Report

The 757 accidents mentioned in the IG report refer to cases entered in the DOI Safety Management Information System database (SMIS DI-134) for the period from Fiscal Year 1988 through Fiscal Year 1992. Since this database is cumulative in nature, and with historical data from this time period still being entered into the database by many bureaus, an exact analysis of the original 757 cases is not possible. The database currently contains 1,155 total cases in the "Contact with Radiation, Chemical, Toxic and Noxious Substances" category. The 757 cases represent a subset of the current 1,155. Our recent analysis of the cause of accident narrative for the 1,155 cases resulted in the breakdown listed below.

Fiscal Years 1988 - 1992

Number of Cases	Subcategory
263	No Narrative (Not Characterized)
144	Chemical Exposure (Fumes, Spills)
116	Chemical Exposure (Eyes)
7	Hazardous Waste Site Injuries
334	Poison Plant Exposure
291	Other (e.g., Indoor Air Complaints)

Total 1,155 (Average number of cases per year 231)

Figures 1 and 2 provide a graphical representation of this data as well as the breakdown of the "Contact with Radiation, Chemical, Toxic and Noxious Substances" category as part of the total DOI accidents.

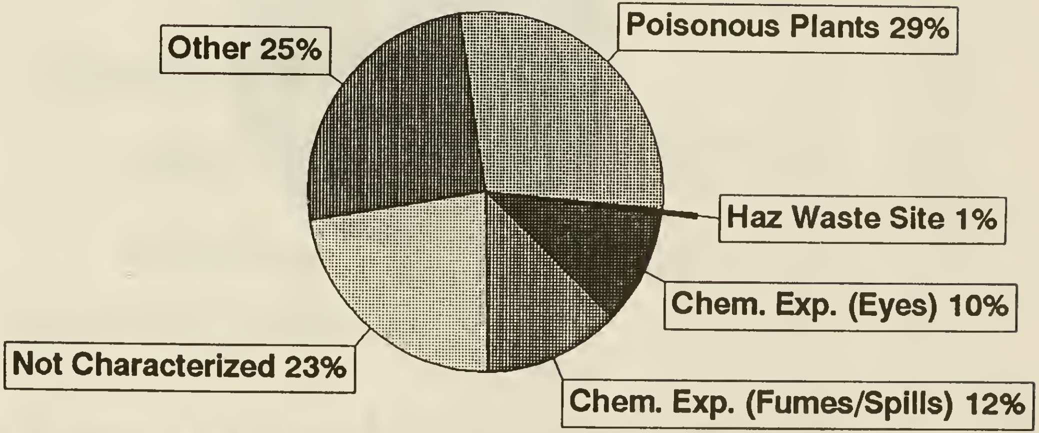
While any accident is of concern, this analysis indicates a somewhat more modest contribution by "Hazardous Materials" and "Hazardous Waste Sites" than the IG report may have. The DOI continues to strive to recognize, evaluate and reduce or eliminate workplace chemical hazards. Because many of the "chemical" accidents discussed above involve laboratory handling problems (e.g., spills and eye injuries) the Department is finalizing specific policy guidance on laboratory safety. In the hazardous waste site area, staff members of the Office of Environmental Affairs and the Office of Safety and Occupational Health are coordinating policy in a variety of areas to assure improved safety and health plans, training, and employee protection.

The accident analysis indicated above are for DOI employees only, no contractor or concessionaire data is included in this total.

Enclosure 1
Figure 1

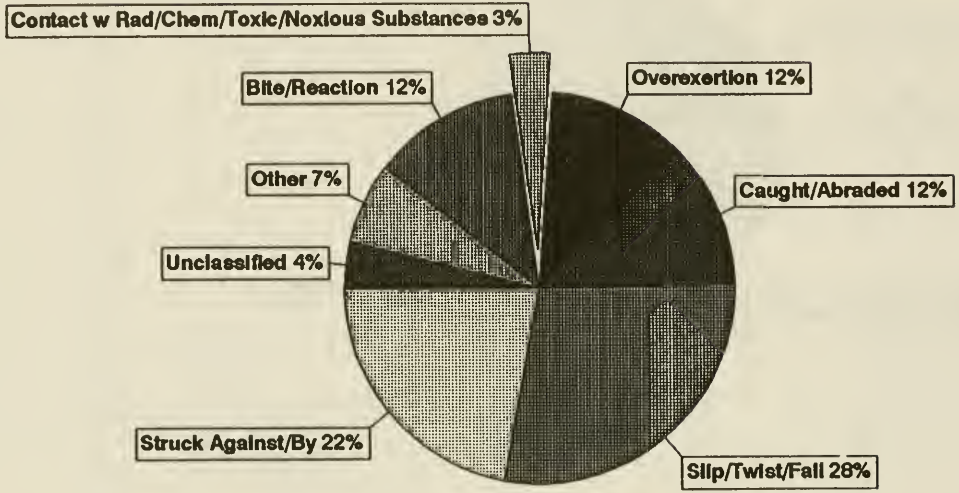
Department of the Interior

Contact with Rad/Chemical/Toxic/Noxious (Poison Plants, etc.) Substances



Enclosure 1
Figure 2

Department of the Interior
Federal Employee Injuries - DI-134



Enclosure 2

STATUS OF BLM IMPLEMENTATION OF THE 1992 RECOMMENDATIONS of the NAE ON HAZARDOUS MATERIALS MANAGEMENT ON THE PUBLIC LANDS

The Senate Governmental Affairs Committee requested a status report on the implementation of each of the recommendations of the National Academy of Engineering (NAE) set out in the National Research Council (NRC) booklet, Hazardous Materials on the Public Lands. The Bureau of Land Management (BLM), to whom most of the recommendations were addressed, and the Department of the Interior (DOI) have recently completed action (or established ongoing action) on a number of the recommendations. The status of recommendations for all 63 actions as of October 1, 1993, is 35 Completed (55.5%), 23 In Progress (36,5%) and 5 Pending (8%). The status of each recommendation, keyed to the text of the report from which it came, are set forth in the pages below.

Wording of the recommendations in the status report is changed for clarity and brevity. Previous reviewers have noted apparent anomalies in the status report: some material from the NAE book seems quite dated and most actions are begun or even completed prior to the April/July 1992 publication date of the report. Since the NAE committee conducted the program evaluation from 1988 to 1990, the "snapshot" and recommendations reflect that time period. The 3 year period from 1988 to 1991 was one of great growth, experimentation and change for the BLM hazardous materials management (HMM) program and the beginning of such a period for the DOI program. When the recommendations became available in 1992, the agencies were pleased to find that many were well on their way to completion.

Recommendation Implementation Status

Page: 64a -- Incorporate NAE recommendations in BLM program policy & objectives.
Status: In Progress
Begun: April, 1992 on delivery
Current Action: Including appropriate recommendations in manuals, rules, plans and procedures.

Page: 64b -- Decentralize the Hazardous Materials Management program to provide more creative solutions.
Status: Completed
Begun: October 1990
Current Action: Codified in Departmental Manual and Bureau policy in FY 1992.

Page: 66a -- Adopt a proactive strategy for managing hazardous waste and solid waste on public lands.
Status: Completed
Begun: August 1991, with drafting of the DOI waste management initiative.
Current Action: Codified in Secretarial Order -- BLM interim manual -- DOI Manual in preparation

Page: 66b -- Establish criteria for transfer of public land for waste management.
Status: In Progress (Further action pending resolution of issue below)
Begun: 1993
Current Action: R&PP landfill disposal rule, CERCLA 120(h) rule.
Issue: What are the legal limits of conditioning a "fee" transfer?

Page: 66c -- Establish procedures and conditions for waste management land transfer.
Status: In Progress (Further action pending resolution of issue below)
Begun: 1993
Current Action: R&PP landfill disposal rule, CERCLA 120(h) rule.
Issue: What are the legal limits of conditioning a "fee" transfer?

Page: 66d -- Establish a policy of no significant environmental degradation from a BLM land transfer.
Status: Pending (Further action pending resolution of issue below)
Current Action: Issue analysis.
Issue: What are the legal limits of conditioning a "fee" transfer?

Page: 66e -- Provide for Federal and State agency and public participation in land transfers.
Status: Completed
Begun: Early 1980's
Current Action: Public review and participation are required in most land transfers as provided by statute.

Page: 67a -- Establish criteria and conditions for waste management for leases on public land.
Status: In Progress
Begun: Fall 1988
Current Action: Current and pending rules and manuals require lease conditions.

Page: 67b -- Incorporate HMM & Solid Waste activities/decisions in related land use plans.
Status: Completed
Begun: Fall 1991.
Current Action: The Supplemental Planning Guidance for HMM was completed in 1993.

Page: 67c -- Assure that other agencies and the public participate in land use planning and leasing.
Status: Completed
Begun: Pre-1980
Current Action: The BLM has a long history of involving Federal, State and local governments, interests groups and affected publics in planning and leasing decisions. This has been especially true where issues concern local health and safety.

Page: 68a -- Revise rules for environmental management of mining under the Mining Law.
Status: Pending
Current Action: Pending amendment of the Mining Law

Page: 68b -- Seek new legislation on mining on the public lands.
Status: Completed
Begun: Spring 1993
Current Action: The Department has a very public commitment to such legislation and is currently pursuing the issue in appropriate Congressional committees.

Page: 69a -- Require that future authorizations for public land use have stipulations for hazardous materials management.
Status: In Progress
Begun: FY 1988
Current Action: Amending BLM rules on rights of way and oil and gas development.

Page: 69b -- Increase inspection and monitoring of public land uses regarding environmental issues
Status: In Progress
Begun: May 1988.
Current Action: Substantial increases have been made in inspection of landfills and land transactions, and oil & and gas development. Other actions are pending BLM reorganization.

Page: 69c -- Propose legislation to condition land transfers to protect the environment
Status: Pending (Further action pending resolution of issue below)
Begun: FY 1989
Current Action: Implementation of the R&PP Act amendments of 1988.
Issue: What are the legal limits of conditioning a "fee" transfer?

Page: 69d -- Achieve BLM compliance with hazardous materials management rules and prudent management.
Status: In Progress
Begun: Spring 1988
Current Action: Establishing environmental audits of BLM facilities, established policy of compliance, instituting all employees chemical management training.

Page: 70a -- Integrate BLM actions on public lands into cooperative regional planning for waste management.
Status: In Progress
Begun: Spring 1988
Current Action: BLM has been a cooperator in regional waste management planning in several States, supplying advice, new regional disposal locations, transfer state sites etc. to local governments and supporting permitting and location of hazardous waste sites for States.

Page: 70b -- Integrate BLM's emergency response program for hazardous materials with State and regional cooperative efforts.
Status: In Progress
Begun: Spring 1989
Current Action: BLM District Offices are required to have a contingency plan for emergency response to CERCLA releases on public lands, and contingency plans, tied to regional and State systems under EPCRA, for chemical releases from BLM facilities. All BLM State Offices will have emergency response contracts in place in FY 1993.

Page: 72a -- The BLM HMM program should be integrated into the BLM planning and program management.
Status: In Progress
Begun: April 1984.
Current Action: BLM has integrated HMM principles into many programs. In 1993 the Planning and HMM programs jointly issued Supplemental planning Guidance for HMM. Other integration efforts are pending BLM reorganization.

Page: 72b -- Enhance Denver Service Center HMM technical expertise and number of trained Field Office Staff.
Status: Completed
Begun: Jan. 1990.
Current Action: SC added personnel with significant with experience in HMM in 1991. The 1993 FTE level for the program was 197 with most positions at the field level.
Page: 73a -- BLM should make greater use of other agencies' expertise and personnel.
Status: Completed
Begun: April 1984.
Current Action: BLM has MOUs for personnel details and expertise with EPA, USGS, USACOE, BOM and several states and many local governments to provide HMM project support and services. Other MOUs are in negotiation.

Page: 73b -- Upgrade professional HMM positions and enhance HMM expertise in the BLM.
Status: Completed
Begun: FY 1988.
Current Action: Most BLM state offices have upgraded program leader positions, and most offices participate in the extensive HMM training program offered internally, from other agencies and from vendors. BLM has also hired more experienced HMM professional from outside the Bureau.

Page: 73c -- BLM should create a Division of Hazardous Materials Management in the Washington Office.
Status: Completed
Begun: Spring 1988.
Current Action: The Division of Hazardous Materials Management has been operating in the Washington Office since August 1990.

Page: 74a -- A senior BLM official should guide the HMM program implementation.
Status: Completed
Begun: Apr. 1984.
Current Action: The program chief has always reported to an Assistant Director. Since Jan. 1991 an Associate State Director has provided guidance on Field implementation of the program.

Page: 74b -- BLM should create an HMM program management team.
Status: Completed
Begun: Jan. 1991.
Current Action: The Field Implementation Group was created in FY 1991. Most of that group's functions were taken over in 1993 by the Hazardous Materials Action Group comprised of the State Office program leaders and senior technical staff of the program.

Page: 75a -- Activate the DOI Deputy Assistant Secretary Advisory Group on Hazardous Materials Management.
Status: Completed
Begun: July 1989.
Current Action: The DAS HMM group has been fully active for some years.

Page: 75b -- Increase the BLM HMM program staffing level, especially in the on-the-ground, District level.
Status: Completed
Begun: Oct. 1988
Current Action: Nearly 65% of BLM District Offices and virtually all State Offices and Centers have at least one full time HMM employee. Depending on need, some offices have several HMM staff. From FY 1989 to FY 1992 the FTE for the HMM program more than doubled.

Page: 76a -- Change the risk-avoidance policy in HMM to a positive approach that incorporates necessary training.
Status: Completed
Begun: Fall 1989.
Current Action: Policy, training, and medical surveillance available where needed as determined by senior field officials. BLM strictly controls entry onto hazardous materials release sites to protect the health and safety of employees and their families and co-workers.

Page: 76b -- BLM should publish and update a 5 year remediation budget.
Status: Completed
Begun: March, 1990
Current Action: Meeting or exceeding all OMB Circular A-11, Exhibit 46, requirements for projection of outyear budgets.

Page: 77 -- Create a core group of expertise and contract oversight at the Denver Service Center.
Status: Completed (See p.72b above).
Begun: Nov. 1990
Current Action: HMM units at SC have been operating since 1991.

Page: 79a -- Move HMM contracting and contracting management out of the BLM Washington Office.
Status: Completed
Begun: April, 1987
Current Action: All HMM remedial contracting has been implemented by the Field Offices since 1987. Other HMM contracting has been implement by the SOs or the Service Center since June 1991.

Page: 79b -- Tailor existing public and private sector training in HMM to BLM requirements as needed.
Status: Completed
Begun: Fall 1988
Current Action: BLM HMM employees use a wide range of internal and external training opportunities to improve their expertise.

Page: 79c -- Create a focus for BLM HMM training at the Phoenix Training Center.
Status: Completed
Begun: Spring 1989
Current Action: The training program now includes 12 courses, 2 all employee training programs and videos, plus association with the Wayne State University in Michigan.

Page: 79d -- Prepare guidance documents for training and direction.
Status: Completed
Begun: Fall 1991.
Current Action: An interim manual (BM 1703) is in place as well as training handbooks and field guidance on a variety of topics. This is a continuing effort.

Page: 79e -- Establish HMM training for BLM managers.
Status: Completed
Begun: Spring 1989
Current Action: The "Managers'" course was first run in July 1990. It is very popular and run frequently.

Page: 80 -- Develop training in waste stream management, waste reduction, and recycling.
Status: Completed
Begun: Nov. 1991
Current Action: BLM has a full course (1703-5) for those whom will manage facilities and their wastes, including the safety aspects. BLM also has just begun an all-employee "Chemical Management" training program to be taught in each District and which includes waste management.

Page: 82 -- BLM needs a more complete HMM Data gathering system (inventory, priorities).
Status: In Progress
Begun: Fall 1988.
Current Action: BLM is working to expand the current inventory into mining, fluid minerals, industrial uses and airports. BLM is also tying the effort into the new DOI "PARIS" data management system.

Page: 83a -- BLM needs a systematic, accurate, and periodically updated HMM release site inventory by use classification and tied to the GIS system.
Status: In Progress
Begun: Summer 1990
Current Action: BLM is building upon existing inventory/risk assessment actions and data in a manner that is both cost effective and responsive to management needs.

Page: 84a -- BLM needs to develop a data base for the management of inventory information regarding hazardous materials release sites and their management.
Status: Complete
Begun: Fall 1986
Current Action: In 1993, DOI added the "PARIS" data base to the recently reorganized BLM site management data base in place since 1986.

Page: 84b -- BLM should provide better direction to FOs on criteria for the EPA docket and for risk assessments.
Status: Completed
Begun: FY 1987
Current Action: While the general criteria are specifically in the statute and rule [40 CFR 300], BLM has provided additional guidance to offices in the interim program manual and in the PA handbook.

Page: 85a -- BLM should "aggressively" inventory the public lands for sources of hazardous and solid waste.
Status: In Progress (see pp. 82 and 83a items above)
Begun: Fall 1988
Current Action: BLM is working to expand into the inventory for mining, fluid minerals, industrial uses and airports. BLM is also trying to identify potential new sources of hazardous materials and wastes the National Environmental Policy Act analysis on proposed uses of the public lands.

Page: 85b -- BLM should put hazardous materials and solid waste data base information into the developing GIS system.
Status: In Progress
Begun: Jan. 1992
Current Action: BLM has begun data standards for entering HMM information in the GIS and has personnel and working groups coordinating current and future efforts.

Page: 85c -- BLM should support more systematic research on the effects of hazardous materials on the resources of the public land.
Status: In Progress
Begun: Fall 1990
Current Action: Specific research has been conducted at hazardous materials release sites on public lands in several states, measuring effects of contaminants on trees, vegetation, soils or habitats. The BLM also anticipates that more such research will be conducted by the National Biological Survey in support of all land management agencies.

Page: 86a -- BLM should require hazardous materials information as a condition of use of the public lands.
Status: Completed
Begun: Fall 1990
Current Action: In 1993 BLM issued a directive (IM-93-344) that hazardous materials use and generation be analyzed as part of the environmental review of each use authorization under the National Environmental Policy Act.

Page: 86b -- BLM should conduct consistent, bureauwide inventory and risk assessment of hazardous materials release sites.
Status: In Progress (see pp. 82, 83a and 85a items above)
Begun: Fall 1989
Current Action: BLM is currently exploring high technology approaches to cost effective inventory and risk assessment, e.g. imagery analysis for inventory.

Page: 87 -- EPA & DOI/BLM should establish a joint program to train BLM employees.
Status: Completed
Begun: Fall 1988
Current Action: While there is no formal agreement, EPA allows other agencies' personnel to participate in most of the EPA training and BLM staffs are encouraged to take advantage of appropriate opportunities. The BLM internal HMM training program stresses the land owner and natural resource manager roles of the BLM mission.

Page: 88 -- DOD and DOI/BLM should negotiate an agreement to achieve mutual environmental goals.
Status: In Progress
Begun: 1990
Current Action: The BLM and the DOD are negotiating a master agreement on environmental management.

Page: 89a -- DOE and DOI should negotiate an agreement to consult on HMM risks that might result from DOE actions.
Status: Pending
Current Action: Under consideration by DOI.

Page: 89b -- Public participation and risk communication should be included in every BLM resource management plan (RMP).
Status: Completed
Current Action: Each RMP includes (in the same document) a NEPA environmental impact statement with the full public participation requirements and environmental risk analysis of an EIS. Since 1986, BLM has been increasingly been adding known hazardous materials issues to the plans and analyses. The 1993 supplemental planning guidance for hazardous materials management and the September 1993 directive to include hazardous materials risks in analyses of authorizations completes this action.

Page: 90a -- BLM needs to sponsor creative education & community outreach to expand opportunities for public participation in waste management and monitoring.
Status: In Progress
Begun: Spring 1989.
Current Action: The public participates extensively and vigorously in land transfer decisions waste management decisions. In 2 cases in Utah, several levels of government combined their decisions on authorizations of waste treatment facilities under BLM's leadership and environmental analysis, allowing far broader participation in the process but much greater efficiency.

Page: 90b -- BLM line officials should provide leadership in intergovernmental HMM coordination, risk communication and promote better communication with States.
Status: In Progress
Begun: Spring 1989
Current Action: BLM has many successful cooperative and leadership efforts. In Idaho, BLM has been a leader in HMM issues and has had mutually supportive relations with State Government on the issues for many years. In other States BLM leadership has been focused more on specific topics, issues or sites, but is growing as we find more mutual grounds for future relations.

Page: 91 -- BLM should establish a toll free number for public reporting of hazardous waste on public lands.
Status: Completed
Begun: July 1993
Current Action: BLM began a toll-free reporting system on a pilot basis late FY 1993 to test demand and debug the system. A coordinated public awareness and education program to support the reporting system was also started this summer.

Page: 92 -- BLM site evaluations and cleanups should continue to be funded primarily through annual appropriations.
Status: Completed
Begun: 1985
Current Action: While continuing, this recommendation is under review by the DOI in light of changing budget procedures, constraints and priorities to seek the most efficient means of funding this type of work. (See next two items.)

Page: 94 -- The Congress should amend CERCLA 120 to create an account through which amounts recovered in cost recovery can be allocated to the budget of the recovering agency for use in other remedial actions.
Status: Pending
Current Action: The Administration work on proposals for reauthorization will include a review of these issues.

Page: 96 -- BLM HMM funding should be done through a combination of annual appropriations and a special "no-year" trust fund.
Status: In Progress
Begun: March 1992
Current Action: DOI is proposing to fund aspects the HMM programs through such a combination of mechanisms in the FY 1995 budget.

Page: 97 -- BLM should give high priority to research on remote sensing of hazardous materials and related sites on the public lands.
Status: In Progress
Begun: 1984
Current Action: The BLM is exploring new strategies for inventory and examining opportunities for cost effective risk scan through remote sensing in 1994 and 1995.

Page: 98 -- BLM should depend on the cleanup technologies developed by other agencies rather than trying to develop their own.
Status: Completed
Begun: 1984
Current Action: The cleanup technology development role generally does not fall with the scope of BLM's mission and the Bureau acquires all such technologies throgh other agencies and the private sector.

Page: 99 -- BLM should develop criteria for automated detection of environmental change.
Status: Pending
Current Action: According to the text of the report this is apparently intended as long term research.

Page: 101a -- BLM should work with EPA, the States, local governments, and the public to promote waste minimization by users of public lands.
Status: In Progress
Begun: 1988
Current Action: While most opportunities are presently local and situational, both BLM and DOI currently have policies promoting such educational efforts.

Page: 101b -- BLM should develop its own waste minimization program.
Status: Completed
Begun: June 1991
Current Action: BLM has an extensive and successful waste minimization/ pollution prevention program in place for reducing the volume and toxicity of solid and hazardous waste, and a broad range of recycling efforts.

Page: 101c -- BLM should promulgate rules to require implementation of waste minimization by users of the public lands.
Status: In Progress
Begun: Summer 1992
Current Action: BLM is working with EPA and States to improve implementation of statutory and regulatory waste minimization and pollution prevention and is in the process of promulgating rules for rights of way and oil and gas development that will implement those and DOI policy on pollution prevention.

Page: 101d -- Coordinate with, and assist EPA to implement the 1986 Report to the Congress on Waste Minimization.
Status: In Progress
Begun: 1991
Current Action: BLM and DOI have begun many of these efforts as part of the DOI Pollution Prevention and Waste Minimization Policy.

Page: 102 -- BLM should ensure that generators on the public lands comply with statutory waste minimization.
Status: In Progress (See 101c)
Begun: 1991
Current Action: BLM is working with EPA and States to improve implementation of statutory and regulatory waste minimization and pollution prevention and is in the process of promulgating rules for rights of way and oil and gas development that will implement those and DOI policy on pollution prevention.

COMPLETED:	**35 (55.5%)**
IN PROGRESS:	**23 (36.5%)**
PENDING:	**5 (8.0%)**

Department of Defense,
Office of the Under Secretary,
Washington, DC.

Hon. Carl Levin,
U.S. Senate, Washington, DC.

Dear Senator Levin: This letter responds to an issue you raised during my appearance before the Senate Committee on Governmental Affairs hearing, September 21, 1993. You asked what the Department of Defense (DoD) is doing to accelerate cleanup activities in cold weather regions with short construction time frames. We share your concerns. Severe winters are a genuine problem at many of the bases engaged in cleanup activities located in the northeast and north central part of the country.

The solution is to schedule required cleanup events in order to use every available workday. From my perspective, it is important that Congress and the Department provide a reliable and timely funding stream to the installation cleanup program managers. The program managers can then work to get contracts in place to support regulatory requirements. This delicate coordination can only be achieved through intense communication and cooperation among key stakeholders. At each base scheduled for closure, we are establishing environmental cleanup teams made up of DoD, Environmental Protection Agency, and state representatives empowered with decision-making authority to expedite the cleanup process. Where these concepts are in place and team members are working to implement mutual goals and milestones, they have demonstrated the ability to adapt to the construction season. Enclosed are examples of this cooperative effort at two Air Force Bases—Wurtsmith and K.I. Sawyer.

This same cooperation and coordination is required at operating bases and we are applying the same techniques at those bases as well.

We appreciate your concern with our cleanup progress.

Yours very truly,

Sherri Wasserman Goodman,
Deputy Under Secretary of Defense,
(Environmental Security).

Enclosure

Wurtsmith Air Force Base and K.I. Sawyer Air Force Base

Due to the extended winter season at Wurtsmith and K.I. Sawyer, extensive cooperation and coordination has been demonstrated in environmental planning and decision-making. For example:

- Environmental cleanup initiatives have successfully progressed in large part due to the Management Action Plan (MAP) process which serves as a road map to manage cleanup and hazardous waste activities. The MAP:
  - —provides a macro view of all environmental contamination;
  - —provides the status of what is known and what needs to be known;
  - —provides a strategy for integrating the appropriate cleanup streamlining concepts identified by various task forces and work groups;
  - —epitomizes the "team" concept involving the Air Force, the Environmental Protection Agency, the state of Michigan and public; and
  - —is a "living" process, evolving as the cleanup evolves.
- Each installation has their own MAP and all phases of the cleanup programs have been fully planned out and documented in the MAPs and are being executed according to established schedules. The MAPs are updated quarterly and include direct input from federal, state, and local regulatory agencies and the general public during on-site review meetings at the bases.
- The MAP process minimizes the possibility of environmental or procedural show-stoppers. For example, preliminary information on available property at K.I. Sawyer will be issued by November 1994 which coincides with the community reuse plan currently scheduled for completion in October 1994.
- Cleanup projects have been reviewed and scheduled to address the seasonal limitations at these two bases. Data gathering is concentrated during the winter months and site work is scheduled during the warmer spring, summer and autumn months.
- During the remedial design phase of the cleanup process, special consideration has been given to technologies that are climate-independent. These technologies will be selected when possible to extend the short construction season.

U.S. Environmental Protection Agency,
Office of Enforcement,
Washington, DC.

Hon. John Glenn, Chairman
Committee on Governmental Affairs, U.S. Senate, 340 Dirksen Building, Washington, DC.

Dear Chairman Glenn: I am writing to respond to several questions that were raised at the September 21, 1993, hearing before the Committee regarding the Federal environmental cleanup program. Two major issues of concern involved (1) government contractors at Federal facilities and (2) the development of standards for radionuclides by the Department of Energy (DOE) and Environmental Protection Agency (EPA). Through the combined efforts of EPA's Office of Enforcement, Office of Solid Waste and Emergency Response and Office of Air and Radiation, we believe that the responses provided below address the concerns of the Committee.

Regarding government contractors, the Committee requested that we analyze the possibility of a contractor who improperly caused hazardous waste contamination at a Federal site being awarded a contract by the Federal agency or EPA to clean up the contamination at the same site. At the outset, I would like to clarify that EPA plays a limited role in other Federal agencies' contract relationships at Federal facilities. The Federal Acquisition Regulation and implementing regulations of the Departments of Energy and Defense govern relationships at Government Owned/Contractor Operated (GOCO) facilities.

EPA does administer the contractor listing program and the suspension and debarment program, which deal with contractor violations of environmental laws and regulations. In accordance with Section 508 of the Clean Water Act (CWA), Section 306 of the Clean Air Act (CAA), and EPA regulations at 40 CFR Part 15, several corporations performing work at Federal facilities have been made ineligible for Federal government contracts, grants and loans. Ineligibility would extend to contracts for the clean-up of environmental damage resulting from CWA or CAA violations, or any other environmental harm at the GOCO facility where the violations occurred.

Ineligibility results from criminal convictions for violations of the Clean Water Act or Clean Air Act. Once the company, or the company's owners and supervisors, are convicted, the facility where the violations occurred is placed on the EPA List of Violating Facilities. Depending on the nature of the violation, the facility placed on the List may be the site of the physical violations or the company's business address, which may result in broader ineligibility, or both. Ineligibility continues until the Assistant Administrator for Enforcement determines that the conditions which gave rise to the violation have been corrected. The following companies with criminal convictions for violations of the CWA or CAA at Federal facilities have been placed on the List of Violating Facilities: Rockwell International Corporation (Rocky Flats Nuclear Weapons Plant), California Marine Commercial Insulation, Inc., and Pacific Ship Repair and Fabrication, Inc.

In addition, EPA, like all other Federal agencies, is subject to the rules governing government-wide suspension and debarment under the Federal Acquisition Regulation (FAR) for direct procurement, and the OMB Common Rule for assistance, loan and benefit transactions. Together, these rules provide the Federal government with comprehensive protection from contractors, subcontractors and individuals that receive Federal contracts, approved subcontracts, assistance, loans and other financial and non-financial benefits in the event that violations such as fraud, waste, abuse, poor performance and environmental misconduct are committed.

If a contractor is alleged or proven to have engaged in serious misconduct, EPA and any other Federal agency may suspend or debar that contractor. Once suspended or debarred, the contractor is entered on a General Services Administration list of ineligible participants and circulated to numerous procurement and assistance award officials throughout the country for enforcement. Generally, a listed contractor may continue to receive non-Federal contracts unless it is financed in part with Federal assistance or is a subcontract subject to Federal approval.

In practice, a contractor that has engaged in environmental misconduct can sometimes remain eligible for subsequent contract activity if the misconduct escapes the attention of the Federal debarment community. This sometimes occurs if State and Federal environmental, civil and criminal authorities do not report the misconduct to the appropriate debarment agency. Moreover, even if reported to an agency and action is taken to suspend or debar the contractor, the debarring official may settle the matter for terms other than debarment. For example, a contractor may have chosen to pay fines, plea to charges, correct the violations, take appropriate internal management and disciplinary actions and accept a compliance program subject to satisfactory field audits or review. In such cases, suspension or debarment may serve no protective purpose and the contractor may regain eligibility.

With regard to the radionuclide issue, the specific questions involved an agreement between EPA and the Department of Energy to jointly develop radionuclide standards for the Waste Isolation Pilot Project (WIPP) and remedial work performed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA) corrective action program. EPA and DOE entered into an Interagency Agreement (IAG) to transfer $8.0 million in Fiscal Year 1994 (FY 94) to support development of WIPP and cleanup standards as these resources were not included in EPA's FY 1993 budget. However, the WIPP legislation authorizes DOE to fund EPA WIPP activities up to $14 million per year, and during FY 1993 DOE did fund most of the Agency's costs for the WIPP and cleanup standards projects. DOE is continuing this support during FY 1994, with the understanding that EPA will work to ensure that funding for these projects will be included in the FY 1995 budget.

Although it is not standard practice for EPA to enter into IAGs with other Federal agencies to provide resources for activities such as the WIPP and cleanup standards, the Agreement provided a temporary solution to a difficult resource and funding question. During the past few years, the Agency has worked towards developing a permanent solution to the funding issues surrounding these projects to avoid the annual renewal difficulties and conflict of interest issues associated with transferring funds from DOE to EPA.

The proposed cleanup regulations will impact private CERCLA sites contaminated with radioactive materials as well as the Departments of Energy and Defense. In addition, the regulations will impact the Nuclear Regulatory Commission (NRC) and its licensees. The greatest cost of radionuclide cleanup is estimated to be associated with the Federal Facility Restoration Program at both DOE and DOD sites, while the impact upon the private sector (i.e., NRC licensees and Superfund Potentially Responsible Parties) is estimated to be significantly less. The funds provided to EPA by DOE to develop these regulations will advance the timetable for promulgation of the regulations. As DOE plans for its environmental restoration efforts and begins actual remediation, reliance upon effective cleanup standards and regulations is a crucial element of an effective and efficient DOE effort.

I hope that this response satisfactorily supplements my answers before the Committee regarding these issues.

Sincerely,

STEVEN A. HERMAN,
Assistant Administrator.

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF MANAGEMENT AND BUDGET,
Washington, DC, November 23, 1993.

Senator John Glenn, Chairman
Committee on Governmental Affairs, 340 Dirksen Office Building, Washington, DC.

DEAR MR. CHAIRMAN: Thank you again for the recent opportunity to appear before the Committee on Governmental Affairs to discuss the Environmental Problems in the Federal Government.

During the hearing, I indicated that I would provide additional information in response to the questions indicated below. I have also provided a response to Senator Levin's question to Steven Herman, Assistant Administrator for Enforcement, U.S. Environmental Protection Agency, concerning the transfer of money from DOE to EPA for standards development.

Question 1. Senator Levin asked that I take a second look at the Executive Order on recycling to make sure that duplication with the interagency task force I proposed in my testimony is avoided.

Answer. On October 20, 1993, the President signed Executive Order 12873, Federal Acquisition, Recycling, and Waste Prevention. The purpose of this Order is to increase waste prevention and recycling in the daily operations of Federal agencies. Among the principal means that the Order provides to achieve this objective is to mandate Federal procurement of recycled paper. The Order also established a Federal Environmental Executive position with the Environmental Protection Agency to ensure compliance with its provisions. The Executive is given authority to establish committees and work groups to assist in implementation of the Order.

The problems addressed by the Order are significantly different from the extensive hazardous and radioactive problems at Federal sites and facilities that were the subject of my testimony on September 21st. To deal with these problems, the administration is proposing to establish a policy-level interagency group to help develop and implement a coordinated approach for Federal facilities waste management and clean-up programs, including analysis and resolution of cross-cutting issues. The scope of work contemplated for this group was outlined in my testimony. I do not believe that there will be any significant overlap with the responsibilities of the Federal Environmental Executive under the new Order on recycling.

Question 2. Senator Levin asked about the work plan for the Interagency Group.

Answer. The interagency group's work plan has not yet been completed, but we will, as promised, provide the Committee with the plan as soon as it is ready.

Question 3. Senator Levin asked Steven Herman whether it was proper for the Department of Energy to transfer funds to EPA for radiation standards development. Mr. Herman said that Senator Levin should ask OMB.

Answer. In the interest of accelerating EPA's development of clean-up standards for soil, groundwater, and waste management at DOE sites contaminated with radioactive and mixed waste and for other purposes, DOE and EPA sought OMB and Congressional support for a transfer of funds and FTE from DOE and EPA in FY 1994. Subsequently, with OMB support, Congress, in the 1994 Energy and Water Development Appropriations Act, approved the transfer of $8 million for these purposes, of which approximately $3.6 million will be allocated to standards work. Twenty FTE's are also administratively transferred from DOE to EPA to supplement EPA's work on standards work and other efforts in FY 1994 only.

This arrangement was made after numerous discussions among EPA, DOE and OMB when it was clear that EPA could not proceed with these important activities in FY 1994 without assistance from DOE. It is understood by all parties that this should not occur in the future, and EPA has agreed to support the standards development effort entirely from its own resources in FY 1995.

Please let me know if you have any additional questions or need additional information.

Sincerely,

ALICE M. RIVLIN,
Deputy Director.

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